



**UNIVERSITY *of*
TASMANIA**

**Accountability of Australian Local Government Authorities for National
Waste Data from Outsourced Services**

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*A thesis submitted to the Tasmanian School of Business and Economics, University of
Tasmania, in fulfilment of the requirement for the degree of Doctor of Philosophy*

July 2016

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Heinrich Oosthuizen

24 July 2016

ACKNOWLEDGEMENTS

My utmost gratitude goes to my supervisors, Professor Roger Willet, Associate Professor Trevor Wilmshurst and Doctor Belinda Williams. Without their invaluable guidance and input, this thesis would not have been possible.

To the external examiners, thank you for the supportive messages and constructive criticism. The thesis benefitted greatly from your suggestions.

To my wife Tersia and son Sean; your support and understanding is more appreciated than you can imagine.

To my parents, thank you for providing us with accommodation from time to time, and looking after Patrick, my cycads and our personal belongings during my candidature.

To my colleagues and peers at the Tasmanian School of Business and Economics, my sincere appreciation for all the support and encouragement I received.

To Little Creatures – thank you for lifting the spirits occasionally.

ABSTRACT

The National Waste Policy Implementation Plan advocates the outsourcing of waste management services by contemplating ‘multi-agency management arrangements’ and ‘active partnerships’ between governments and industry (EPHC 2010a, p. 9). The Tasmanian Waste Strategy reinforces the national outsourcing approach by recommending that local government authorities (LGAs) engage in initiatives such as ‘collaborative partnerships’ with industry (Environmental Protection Authority 2009, pp. 3 & 9).

The outsourcing of waste management services by LGAs to external service providers introduces another layer of accountability, resulting in the flow of waste data across organisational and geographical boundaries, which leads to a more complex reporting environment (Ball, Broadbent & Jarvis 2006).

This thesis investigates whether the expectations of the federal Australian government with respect to the provision and dissemination of data through the outsourcing of municipal solid waste (MSW) are being fulfilled by posing the question: Are the accountability expectations of the Australian federal government satisfied in the outsourcing of waste management services by LGAs?

This study broadly follows the institutional collective action (ICA) framework’s (Feiock 2013) approach to explore the Australian federal government’s accountability expectations, due to the collective action required by multiple LGAs and their service providers in different jurisdictions to provide national waste data (Bel, Fageda & Mur 2014). A multi-method approach combining textual narrative analysis of documents, archival records and direct observation supplemented by semi-structured interviews is followed (Yin 2014).

The study found that managers of LGAs and their service providers are only willing to supply waste data through an accountability relationship with higher levels of government based on compliance with minimum legal requirements. The lack of adequate waste data collection tools constrains the collection of outsourced waste data, whilst the collaborative outsourcing practices of LGAs in Tasmania’s Southern Waste Strategy Authority (SWSA) jurisdiction resulted in some complex forms of multi-agency arrangements and partnerships. In the absence of improved communication and consultation between all principals and agents, the accountability expectations of the Australian federal government for improved waste data collection systems will not be met.

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Chapter 1: Introduction

The aim of this thesis is to investigate the accountability expectations of the Australian federal government of local government authorities' (LGAs') outsourcing of waste services in Tasmania's Southern Waste Strategy Authority (SWSA) jurisdiction.

1.1 Background to this study

The volume of waste in Australia has become 'visible' and 'unavoidable', and this is presenting itself as an 'environmental crisis' to the community (Qian, Burritt & Monroe 2011, p. 94).

In 2011, Australia was the world's seventh-highest producer of waste per capita, producing two tonnes of waste per person per year, and disposing of approximately 50% of this in landfill as compared with Western European countries where less than 10% of waste is disposed in landfill (EPHC 2010b, p. 16). In Tasmania, this percentage is much higher, being at least 70% (Blue Environment 2013, p. 9). In Australia, LGAs attend directly or through outsourcing to the collection and treatment of the great majority of municipal solid waste (MSW) (Blue Environment 2013, p. 79).

The Australian Federal Government has become increasingly concerned about its obligations resulting from internationally binding agreements, such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) and the Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention) (SCEW 2012, p. 31). In response to these international obligations, the Council of Australian Governments (COAG) committed Australia to reducing the impact of waste on the environment and to improve the responsible treatment of hazardous waste by adopting the National Strategy for Ecologically Sustainable Development in 1992 (SCEW 2012, p. 2).

To give effect to this national strategy, a need for a regulatory framework for waste management and resource recovery in Australia was identified, and in November 2009 Australia's environment ministers through the Environment Protection and Heritage Council endorsed the National Waste Policy: Less waste, more resources.¹

¹ Participants in the course of this study believe that the delay in adopting a national waste policy was the consequence of the Hawke-Keating and Howard governments' disagreeing on whether the national strategy should be executed through national or state policy directives (Interviewee 8).

The overarching aims of the national policy are to generate less waste; to reduce the amount of waste for disposal; to manage waste as a resource; and to ensure safe and environmentally sound waste treatment, disposal, recovery and reuse (EPHC 2010a, p. 5).

In order to prioritise critical initiatives and to assign responsibilities in respect of the National Waste Policy, a National Waste Policy Implementation Plan was jointly developed by all Australian governments, with input from industry, business and the community. It was approved by the Environment Protection and Heritage Council (EPHC) on 5 July 2010. The National Waste Policy Implementation Plan notes that the various 'individual jurisdictions will continue to manage waste in line with their strategic objectives and constitutional responsibilities' (EPHC 2010a, p. 4 & 5); for example, in Tasmania the Environmental Management and Pollution Control Act 1994 assigns responsibility to the Environment Protection Authority (EPA) to regulate waste management activities (Environmental Protection Authority 2009, p. 2).

The various states and territories have formally adopted different waste management strategies in response to their obligations in respect of the National Waste Policy Implementation Plan. The Tasmanian government, the jurisdiction in which the SWSA resides, adopted the Tasmanian Waste and Resource Management Strategy (Tasmanian Waste Strategy) in June 2009 (Environmental Protection Authority 2009, p. ii).

The accountability expectations of the Australian federal government with regard to the provision of data regarding the handling and treatment of waste are embodied in the National Waste Policy Implementation Plan. There is an expectation from the federal government that waste data collection and supporting data collection systems will be improved to facilitate the three-yearly national 'current and future trends waste and resource recovery report' (EPHC 2010a, p. 19).

The National Waste Policy Implementation Plan does not assign responsibility to LGAs to provide waste management data directly to the Commonwealth Government (EPHC 2010a, p. 19). While constitutionally unable to enforce particular methods of MSW management on the states and LGAs, the Accounting and Accountability Act (2013) introduced by the Abbott government imposed requirements on state governments and their departments with regard to the provision of data. (Public Governance, Performance and Accountability Act 2013).

In response to the federal government's accountability expectations, the Tasmanian government through the Tasmanian Waste Strategy acknowledges (p. 2) the need for Tasmania to establish a more sustainable approach to waste management through alignment with national standards and initiatives by accepting responsibility (p. 15) for providing national waste data and by directing (p. 8) LGAs to establish action plans to give effect to the strategy's objectives (Environmental Protection Authority 2009).

The Tasmanian state government assigned some of its responsibilities to account for national waste data to LGAs by remarking, 'Continue to participate in and support national data collection..... State Government, Local Government, Industry Associations, Industry, Community organisations, the public' (Environmental Protection Authority 2009, p. 15).

The accountability relationship in this instance is complicated by the fact that whilst the federal government and state governments acknowledge local communities' right to the provision of waste management services by LGAs, it imposes an additional reporting responsibility for waste management data through state and territory governments to facilitate the National Waste Report that is published every three years (EPHC 2010a, p. 19).

The National Waste Policy Implementation Plan advocates the outsourcing of waste management services by contemplating 'multi-agency management arrangements' and 'active partnerships' between governments and industry (EPHC 2010a, p. 9). The Tasmanian Waste Strategy reinforces the national outsourcing approach by recommending that LGAs engage in initiatives such as 'collaborative partnerships' with industry (Environmental Protection Authority 2009, pp. 3 & 9).

These collaborative initiatives may take various forms, such as outsourcing through arms-length contracting, outsourcing to public-private partnerships or outsourcing to other public entities (Dollery, Akimov & Byrnes 2009; Dollery, Grant & Akimov 2010).

The outsourcing of waste management services by LGAs to external service providers introduces another layer of accountability; for example, recycling initiatives being outsourced to the private sector result in the flow of waste data across organisational boundaries and leads to a more complex reporting environment in respect of the waste data collection and dissemination process (Ball, Broadbent & Jarvis 2006).

In the case of the LGAs active in the SWSA jurisdiction in Tasmania, waste management services are outsourced to a variety of different service providers, some public and some

private (Blue Environment 2011, pp. 26 & 27). This results in a complex network of relationships between many different parties, potentially with accountability problems (Cruz & Marques 2012).

In light of the potential accountability problems associated with close-knit networks, for example, the resistance of principals to hold agents to account (Girth 2014), the question arises whether the outsourcing practices, as suggested and directed by the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy, satisfy the federal government's accountability expectations of improved waste data and data collection systems.

1.2 Research question

This thesis investigates whether the expectations of the federal Australian government, with respect to the provision and dissemination of data through the outsourcing of MSW management, are being fulfilled. The research question (RQ) of this thesis is the following:

Are the accountability expectations of the Australian federal government satisfied in the outsourcing of waste management services by LGAs?

1.3 Overview of prior relevant research

1.3.1 Accountability of LGAs for waste data to higher levels of government

In addition to the duty of public managers to account for their compliance with statutory provisions and legal requirements, some researchers argue that public managers are also morally accountable to society for the adoption and measuring of performance against sustainability targets, such as reduction of waste disposal to landfill (Bebbington et al. 2007; Bebbington & Gray 1993; Gray 1992, 2005, 2013; Gray, Brennan & Malpas 2013). The question arises whether an accountability relationship between the federal government and LGAs with regard to waste data exists if the moral duty to account lies with local communities and legal compliance lies with state laws and regulations (Aulich 2011).

In considering accountability relationships, Lindberg (2013) argues that accountability consists of four key elements: (1) an agent or institution which has to give an account, (2) acceptance by the agent for an area or domain of responsibility, (3) a principal to whom the

agent must account and (4) the right of the principal to sanction the agent if the agent fails to account adequately.

The fear of sanction may lead to LGA managers (agents) not adequately complying with governmental directives (principal) by adopting a narrow reactive approach to policy interventions rather than a long-term best-practise² approach (Ball, Broadbent & Moore 2002).

Accountability challenges may also arise where the principal-agent relationship is characterised by ill-defined performance measures (Ball, Broadbent & Jarvis 2006; Jensen & Meckling 1976). Studies on performance management systems (PMS) of Australian LGAs found that PMS are only moderately effective and in need of improvement (Baird, Schoch & Chen 2012; Lee & Fisher 2007). Umashev & Willett (2008), for example, found that PMS systems of a large Australian LGA are constrained by various factors, including human resource capacity. LGAs may find it difficult to meet the accountability expectations of the federal government in those instances where appropriate responses to such expectations are not clearly formulated in the agencies' corporate plans.

Prior studies have also found environmental management systems of LGAs to have limitations to collate and distribute sustainability and environmental information to internal and external users. For example, Williams, Wilmshurst & Clift (2011) found the uptake and development of sustainability reporting in the local government sector to be limited and inconsistent, whilst Qian, Burritt & Monroe (2011) found that some contractors to remote or small LGAs do not have the capability to capture and record full waste data.

The demand for sustainability and environmental information by higher levels of government is often constrained by undue expectations in unreasonable timeframes from the principals in some instances, with the lack of clear direction leading to uncertainty and tension between actors in the accountability relationship (Ball, Broadbent & Moore 2002). Bigdeli, Kamal & de Ceasare (2013) suggest that higher levels of governments can strengthen inter-organisational communication systems through funding and training of employees, while Moll & Hoque (2008) suggest that uncertainties and tensions in public agency relationships can be reduced by the introduction of a service-level agreement.

² Best-practise in the context of Tasmanian waste management is defined as 'cost-effective measures assessed against the current international and national standards applicable to the activity' (Environmental Management and Pollution Control Act 1994, sec 4).

Adequate communication is a key element in an effective accountability relationship between the federal government and lower-level government agencies (Burritt & Welch 1997; Reid 2012). Lengthening chains of delegation and an increasing divide between the origins of government activity and the point of service delivery results in dynamic relationships between multiple principles and agents which may result in the public interest not being adequately served (Calabro & Torchia 2011; Heinrich, Lynn & Milward 2010). The outsourcing of waste management services thus may negatively impact on LGAs' ability to collect and report waste data across organisational boundaries (Burritt & Schaltegger 2012; Perlman 2013).

1.3.2 Outsourcing of waste management services by LGAs

The decision to outsource waste management services is a complex management process which combines transaction costs, managerial concerns and social choice issues (Bel & Fageda 2010).

A number of studies on outsourcing are in agreement that the primary motivation for outsourcing in both the private and public sector is transaction cost considerations, such as cost-saving and cash flow improvements (Chalos & Sung 1998; Lacity, Hirschheim & Willcocks 1994; Warner 2011; Zhu, Hsu & Lillie 2001).

Waste management transaction costs are mostly difficult to measure due to the lack of clear and objective outcomes (Bel & Warner 2009), whilst modern waste management services are also characterised by high asset specificity, such as highly regulated landfill developments, capital-intensive waste transfer stations and expensive multi-purpose garbage collection vehicles (Brown, Potoski & Van Slyke 2010; Williamson 1999). Public managers are therefore prone to outsource easily measurable services that can be monitored through arms-length contracts and more likely to keep difficult to measure and highly asset-specific services such as waste management in-house (Bel & Fageda 2007, 2009; Brown, Potoski & Van Slyke 2008).

Small and especially rural LGAs are restricted by a limited number of waste suppliers (Bel & Fageda 2011; Bel, Fageda & Warner 2010; Bel & Warner 2013; Minkoff 2013; Zafra-Gómez et al. 2013). In these circumstances, it becomes difficult for managers to sanction suppliers for non-performance due to a lack of alternative options, which may lead to

increased transaction costs and accountability problems (Dijkgraaf & Gradus 2007a, 2007b; Girth et al. 2012; Warner 2009).

Due to the above accountability problems and high asset specificity that characterise waste management services, LGA managers increasingly make use of outsourcing arrangements such as collaborations and partnerships through inter-local relational contracting rather than arm's-length commercial contracting (Bel & Fageda 2008; Bel, Fageda & Mur 2014; Bel & Warner 2013). Inter-local relational contracting with regard to regional waste handling and disposal implies a greater element of trust, with reduced levels of control and monitoring (Brown, Potoski & Van Slyke 2007).

Social choice issues such as increased service demands which require infrastructure improvements characterised by political alliances also play a role in the inter-local outsourcing decisions of LGAs (Brown, Potoski & Van Slyke 2006; Dollery 2010; Dollery & Akimov 2008a; Dollery, Akimov & Byrnes 2009; Dollery & Grant 2009; LeRoux & Pandey 2011; Varadarajan 2009). For example, the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy advocate the creation of best-practise waste management networks to improve collection and reporting of waste data to higher levels of government (Environmental Protection Authority 2009, pp. 2, 5 & 14; EPHC 2010a, p. 19).

The proposed best-practise principles by design should result in suitable tools to guide responses to higher-order policy interventions (Ball, Broadbent & Jarvis 2006). McIvor (2008) suggests that theoretical frameworks for successful outsourcing derived from the scholarly literature can be used to develop such best-practise management systems. Vagadia (2012) proposes the most recent comprehensive framework for successful outsourcing by consolidating his findings with concepts derived from earlier scholarly work, such as McIvor (2008), Kakabadse & Kakabadse (2005), Lacity and Willcocks (1994), Quinn & Hilmer (1994) and others.

Complex public networks are characterised by horizontal accountability relationships in contrast with traditional command-and-control vertical agency relationships (Bertelli & Smith 2010; Carr & Hawkins 2013; LeRoux, Brandenburger & Pandey 2010; LeRoux & Carr 2010). Incomplete contracting between actors in horizontal relationships in the network may thus result in governance arrangements based on trust rather than written contracts (Brown, Potoski & Van Slyke 2006; Hart & Moore 1988, 2008).

The accountability implications with regard to agency relationships based on trust and the resulting incomplete contracting between actors in such environmental management networks are under researched and require more attention (Ball & Bebbington 2008; Ball, Broadbent & Jarvis 2006; Calabro & Torchia 2011; Doberstein 2013a). By developing an improved understanding of these regional network complexities, policy makers will be in a better position to consider what are the most effective and efficient options for collecting regional waste data for the purposes of reporting national waste data, as contemplated by the National Waste Policy Implementation Plan (EPHC 2010a, p. 19).

1.4 Overview of the theoretical framework

This study broadly follows the institutional collective action (ICA) framework's approach to explore the Australian federal government's accountability expectations by (i) determining the scale and nature of the accountability expectations, (ii) determining the response preferences to the accountability expectations within and across jurisdictions and organisations and (iii) determining what mechanisms are available to respond to the accountability expectations when outsourcing waste management services (Feiock 2013).

(i) The scale and nature of the accountability expectations are determined by exploring the relevant data collection and reporting strategic objectives from the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy against the elements of Lindberg's (2013) accountability map.

(ii) To explore the different response preferences to the accountability expectations which impact across organisational boundaries, the study followed Burritt's (2012) approach (Burritt 2012). This entails an analysis of relevant narratives in LGA corporate plans and posing appropriate interview questions to participants.

(iii) The National Waste Policy Implementation Plan directs the establishment of best-practise waste management networks for remote communities (EPHC 2010a, p. 19). The study examines the mechanisms available to LGAs to guide the outsourcing initiatives by reviewing the accountability principles of best-practise outsourcing frameworks available in the management literature (Vagadia 2012).

The ICA framework is underpinned by a number of research traditions and theoretical approaches (Feiock 2013). Transaction cost economics (TCE) is one of these theoretical foundations. TCE is specifically relevant to the outsourcing of waste management services

due to the asset specificity and measurement problems related to waste management services which increase supplier hold-up risk and transaction costs (Williamson 1981, 1987, 1993, 1999).

The ICA framework also incorporates Agency Theory, which is relevant to this study because potential accountability problems may arise in those instances where for-profit service providers act in their own commercial best interests and do not disclose sufficient information for adequate accountability. Senior and middle managers of LGAs may similarly be conflicted in providing waste data that may impact on their job security, status or social standing. Agency Theory is used to develop an understanding of how incongruent goals of principals and agents may impact on government's accountability expectations (Brown, Potoski & Van Slyke 2010; Jensen & Meckling 1976; LeRoux & Pandey 2011).

The ICA framework has not previously been applied in studies of waste management in the local government sector. The ICA framework has successfully been applied in studies in similar policy areas of water (Berardo & Scholz 2010), public safety (Andrew 2009) and regional planning (Gerber, Henry & Lubell 2013).

1.5 Research methods

The methods used are qualitative, consisting of a textual analysis of documents and transcribed interviews in the following sequence of steps:

1. A narrative textual analysis of accountability provisions in the National Waste Policy Implementation Plan and Tasmanian Waste Strategy is conducted. The accountability provisions are considered against the findings of the literature review and a codebook of key concepts is developed. The scale and nature of problems related to the federal government's accountability expectations as contemplated by the ICA framework in 1.4 (i) is established. Areas that require further investigation are identified and appropriate interview questions are posed.
2. The most recent corporate plans for the LGAs in the SWSA jurisdiction are obtained, and a narrative textual analysis of the corporate plans is performed by coding the documents against the key concepts developed in step 1. The data are analysed and interpreted. The

natural response preferences³ of LGAs resulting from the federal and state governments' waste policy interventions are determined as contemplated by the ICA framework in 1.4 (ii). Accountability issues that require further examination are identified and appropriate interview questions determined.

3. Where LGAs incorporate best-practise mechanisms in their operations, a narrative textual analysis of the corporate plans referred to in step 2 above are performed against the governance mechanisms designed to strengthen accountability available from the best-practise outsourcing literature. The data are analysed and interpreted to determine the extent of adoption of such best-practise mechanisms as contemplated by the ICA framework in 1.4 (iii). Accountability issues that require further examination are identified and appropriate interview questions are posed.

4. Semi-structured interviews with selected senior and middle managers of LGAs in the SWSA jurisdiction, their service providers and stakeholders are undertaken to examine the areas of concern identified during the narrative textual analysis of documents phase. Interviews are triangulated with observation of practices, minutes of public meetings, newspaper articles and other documents of public interest where deemed appropriate.

5. The data derived from the transcribed interviews are coded, analysed and interpreted. The views of interviewees regarding the scale and nature of problems related to the federal government's accountability expectations as contemplated by the ICA framework in 1.4 (i) are reported. The views of interviewees regarding the natural response preferences of LGAs resulting from the federal and state governments' waste policy interventions as contemplated by the ICA framework in 1.4 (ii) are reported. The views of interviewees on the extent to which LGAs incorporate best-practise governance mechanisms in their operations as contemplated by the ICA framework in 1.4 (iii) are reported.

6. The findings in steps 1 to 5 are consolidated to draw conclusions on whether the outsourcing practices of LGAS in the SWSA jurisdiction have met the accountability expectations of the federal government.

1.6 Summary of main results and findings

³ LGA managers have a spectrum of possible responses to policy interventions, that is, a narrow reactive approach to demonstrate improvement on the one end or a systems approach by adopting a business excellence model on the other end (Ball, Broadbent & Moore 2002).

This study focusses in the main on the accountability of lower level agencies to higher level principals in the public sector. The specific context of this accountability study is the accountability relationship between the LGAs and their waste service providers in the SWSA jurisdiction, and the Australian federal government. The main findings of the study are summarised below with an expanded discussion and reporting of ancillary findings to follow in Chapters 8 and 9.

LGA managers and the managers of their service providers are only willing to supply waste data through an accountability relationship with higher levels of government based on compliance with minimum legal requirements. They are willing to improve regional waste data collection systems on other grounds. Interviewees do not believe that the introduction of a compulsory waste disposal levy will generate sufficient funding to provide incentives for agencies to improve their waste data collection systems.

Improvements to regional waste data collection systems are not adequately guided by the Tasmanian government due to resource constraints. The lack of adequate waste data collection tools constrains the collection of waste data. The partnership agreement to facilitate improved communication between the Tasmanian government and LGAs is ineffective in the SWSA jurisdiction with regard to the supply of waste data and improvement of data collection systems.

Some participants do not believe that once LGAs have outsourced waste disposal services they should be held accountable for the supply of waste data to higher levels of government (Interviewee 9 ; Interviewee 12). LGAs are also constrained by the length of the contract periods to negotiate new clauses enabling them to demand the waste data expected by the federal government.

The collaborative outsourcing practices of LGAs in the SWSA jurisdiction resulted in some complex forms of multi-agency arrangements and partnerships. There is a lack of certainty whether the SWSA, Southern Tasmanian Councils Authority (STCA), Southern Waste Solutions (SWS) or Local Government Association of Tasmania (LGAT) network should have responsibility for supplying waste data to the Tasmanian government. In the absence of improved communication and consultation between all principals and agents, including all levels of government, the accountability expectations of the Australian federal government for improved waste data collection systems will not be met.

1.7 Overview of this study

The thesis consists of nine chapters as follows:

Chapter 1 gives the background to the study, the research question and the contribution of the study. It also gives an overview of the theoretical approach and the research methods adopted and it outlines the structure and organisation of the thesis.

Chapter 2 provides a literature review of the key concepts of accountability in the public sector and the impact of public policy on accountability and defines key terms and definitions. It reviews research that examines the nature of the accountability relationship between LGAs and higher levels of government and research regarding the outsourcing of waste management services.

Chapter 3 presents the theoretical framework of the research and considers the relevance and applicability of existing research approaches for this study. It addresses the research question whether the outsourcing practices of LGAs are compatible with the Australian federal government's accountability expectations of LGAs to adequately supply waste data for the purposes of national reporting. A study of the accountability expectations of the Australian federal government with regard to the outsourcing of waste management services by LGAs requires an institutional collective action approach informed by a combination of economic, institutional, management and sustainability theories and frameworks.

Chapter 4 deals with the methods and access to data. It details the specific data sources, collection and analysis techniques used in the thesis. Use is made of NVivo software to support a textual narrative analysis of literature, public policy documents, corporate plans and transcribed interviews. The findings from an analysis of the public policy documents and LGA corporate plans inform the questions asked in interviews.

Chapter 5 examines the accountability provisions contained in the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy. It critiques public policy documents using concepts derived from the literature review. The responses of LGAs and their service providers to the waste policy interventions from higher levels of government are considered in the context of accountability and outsourcing literature. From the findings of the analysis, specific accountability issues are identified to be explored in interviews with participants in the SWSA jurisdiction.

Chapter 6 examines the governance principles contained in best-practise outsourcing frameworks against the corporate plans of the LGAs in the SWSA jurisdiction. From the findings of the analysis, specific accountability issues are identified to be explored during interviews with participants in the SWSA jurisdiction.

Chapter 7 presents the results of the interview process, describes the interview data and analyses the data. The data from the interviews are discussed in the context of governmental accountability directives and concepts from the literature.

Chapter 8 examines the key findings of the thesis in relation to the research question.

Chapter 9 concludes on the implications of the research for adoption of outsourcing best-practise governance principles by LGAs. Implications for implementation of waste management public policy in outsourcing regimes anchored by LGAs are discussed. Limitations of the study and future research directions are identified.

Chapter 2: Literature review: Aspects of accountability related to the outsourcing of waste management services by LGAs

2.1 Introduction

This chapter defines key terms and definitions. It examines the nature of accountability relationships between principals and agents in the public sector. It explores reasons why LGAs outsource waste management services in Australia and other international jurisdictions. It also explores how the attributes of LGAs and the nature of public waste management services impact on accountability. It considers frameworks and theoretical approaches available to guide successful outsourcing of waste management services by LGAs designed to satisfy the Australian federal government's accountability expectations with regard to waste data.

2.2 Key terms and definitions

2.2.1 Accountability

Gray (1992, p. 401) argues that accountability is essentially about the 'right to receive information and the duty to supply it'. In his opinion, this is an essential element of participatory democracies (Gray 1992). The minimum duty of accountability is that of compliance with the law and reporting on the extent of compliance (Bebbington & Gray 1993). In contrast, Gray (2005) contends that the right to information is not just derived from legal or quasi-legal sources but could also be based on moral grounds (Gray 2005).

Accountability encapsulates both the giving and demanding of information (Broadbent & Laughlin 2009; Roberts & Scapens 1985). Accountability is ordinarily framed in formal terms regarding who becomes the accountant, whom they are accountable to, what they are accountable for and how they must account. The framing of accountability is mostly in legal terms and normally involves the production of some or other account (Bebbington et al. 2007).

Barton (2006) finds accountability in the public sector to include notions such as the provision of information, openness and transparency. He argues that accountability in the public sector is based on the acceptance of responsibility, explaining and justifying your actions whilst taking responsibility for the outcomes:

Accountability involves an obligation to answer for one's decisions and actions when authority to act on behalf of one party (the principal) is transferred to another (the agent) (Barton 2006, p. 257).

Political accountability in the public sector is delivered through the traditional convention of democratic oversight of parliament by holding the relevant ministers responsible for implementing and reporting on policy implementation (Gains & Stoker 2009).

In contrast, accountability can be also framed in managerial terms; that is, the duty to describe performance provides the basis for accountability (Ball & Bebbington 2008; Ball, Broadbent & Moore 2002). Gains & Stoker (2009) explain that accountability is strengthened by setting objective managerial financial and performance targets and providing information as to the achievement of these targets (Gains & Stoker 2009).

Dollery & Manly (2007) argue that accountability in local government primarily centres on the duty to provide services to people, establishing a means to evaluate these services and allowing citizens to compare expected and delivered services (Dollery & Manley 2007).

From the above, it is concluded that accountability in local government should be framed in terms of (i) accounting for service delivery to local communities, (ii) accounting to higher levels of government for compliance with laws and regulations and (iii) accounting to a variety of stakeholders for performance based on other moral grounds.

2.2.2 *LGAs*

In Commonwealth countries, the power of parliament to direct lower-order levels of government is mostly governed by statute or by a country's constitution (Feaver & Sheehy 2014). The Australian constitution does not mention LGAs, nor does it clarify the increasingly important role of LGAs as the third sphere of government providing essential public services (ALGA 2012, pp. 2, 4 & 5). The recent Pape and Williams high court cases have created great uncertainty with regard to accountability relationships between the federal government and LGAs, with calls being made for the constitution to be amended through a public referendum (ALGA 2012, p. 7).⁴

⁴ Refer to Chapter 5 for a discussion on the accountability relationships between the three levels of government.

LGAs are creatures of the respective states and territories' acts and, as such, have accountability obligations to those state and territory parliaments (Grant & Fisher 2011). LGAs are therefore legal entities, managed by duly appointed managers, directly (in the case of single LGAs) or indirectly (in the case of joint LGAs), overseen by democratically elected councils, constituted in respect of an area by any one of the seven state and territory local government Acts. The varying acts confer responsibilities, powers and functions on the LGAs, and they have full legal capacity to perform anything necessary to perform these functions. In Tasmania, LGAs are governed by the Local Government Act, 1993.

Regional authorities such as SWSA and the Copping Regional Authority trading as SWS are constituted as joint LGAs and governed by boards representing their member councils. The nature and scope of representation are determined by the rules or constitution of the relevant regional authority (Local Government Act 1993, sections 30 & 35).

2.2.3 Outsourcing

Public sector outsourcing refers to the transfer of a public service function to an external organisation, not necessarily in the private sector (Jensen & Stonecash 2005). Recent definitions of outsourcing include the concept of preferring external service provision over internal delivery, for example:

.....the passing of functions previously performed in-house to outside contractors (Aulich & Hein 2005, p.36),

and in a similar vein,

...as having activities that were formerly done inside the organization now performed by an external supplier (Bengtsson & Dabhilkar 2009, p. 232).

Outsourcing in the context of this study means the service delivery choice by a LGA to source waste management services from external service providers, public or private, rather than providing these services through in-house capabilities.

2.2.4 Waste management services

Waste in the context of this study on outsourcing by LGAs is referred to as MSW (municipal solid waste).

Authorities globally do not agree on the definition of MSW (Tonjes & Greene 2012). In the Australian context, there are currently differences in jurisdictional definitions, classifications and methods for measuring waste data (SCEW 2012, p. 17). The Environment Protection and Heritage Council (EPHC) coordinated the development of the National Waste Policy, which has a priority commitment to assess existing classification arrangements and to undertake national harmonisation (EPHC 2010a, p. 15).

In anticipation of an Australian national definition for MSW, the European Union definition in Eurostat (2010) is adopted by this study for the time being. Their definition describes MSW as the following:

...waste generated by households and other wastes, which are similar in nature and composition, collected and managed by or on behalf of municipal authorities, ... similar wastes from...commerce, offices and public institutions.....and.....paper, plastics, food, glass, and household appliances. (Tonjes & Greene 2012, p. 758)

Waste management services are interpreted to mean all activities undertaken by an LGA in accordance with the stated aims of the National Waste Policy, namely,

...to avoid the generation of waste; reduce the amount of waste (including hazardous waste) for disposal, manage waste as a resource and ensure that waste treatment, disposal, recovery and re-use is undertaken in a safe, scientific and environmentally-sound manner. (EPHC 2010a, p. 5)

Waste management services in this study therefore include 1) planning, which includes educational initiatives; 2) collection; 3) treatment, which includes re-use, recycling and resource recovery; and 4) disposal to landfill.

2.3 Accountability in the public sector and the impact of public waste policies on accountability

Studies on the impact of federal and central government waste policy on local governments are limited. Simões & Marques (2012) conducted an extensive literature review of 107 papers on economic performance of the MSW sector that were published since 1965. They express surprise over the very limited number of publications in 45 years on the economic aspects of waste management. In their opinion, governance of waste is far more important than the reviewed articles suggest. They are particularly concerned about the lack of studies regarding

regulatory impacts on economic performance of waste management enterprises. Equally surprising is the lack of studies on benchmarking of performance. The authors conclude that these are important areas for future research (Simões & Marques 2012).

In considering similar policy areas in waste management, Ball, Broadbent & Moore (2002) in a case study of a UK local authority on the implementation of best-value policy⁵ interventions by the central government remark that central-local government relations remain a major concern. They found the following:

Implementation of the best-value policy in a dynamic social political environment places considerable demand on the managerial skills and resources of LGAs.

The fear of not complying with governmental directives is very real, and the macro-political agenda is keenly felt by LGA administrators.

Confusion regarding implementation of the national policy was in some instances caused by uncertainty regarding lack of defined expectations, for example, ill-defined performance measurement indicators.

LGA managers had a spectrum of possible responses to the best-value policy interventions, that is, a narrow reactive approach to demonstrate improvement on the one end or adopting a systems approach by adopting a business excellence model on the other end.

Some senior managers do not embrace the policy intervention in its entirety, for example, expectations that community consultations must take place.

The authors concluded that the key to understanding the central-local government relationship lies in appreciation of the fact that fundamentally central governments want to claim credit for achievements in implementing national policy (Ball, Broadbent & Moore 2002).

Barton (2006) cautions that adoption of business excellence or best-practise models as suggested by the UK best value policy and the Australian National Waste Policy Implementation Plan may lead to accountability problems because transparency is not part of

⁵ In terms of the best-value policy, the UK Commonwealth expect LGAs to deliver and measure performance of service delivery both in terms of quantity and costs against three criteria, namely efficiency, economy and effectiveness.

business operations, whilst it is essential for public sector accountability. He observed that past Australian governments (e.g. the Kennett and Carnell governments) were proud to adopt business practices in their operations, and they achieved significant success in fostering economic growth. He argues that even though governments achieve economic success, if they do not amend managerial business best-practises to include notions of transparency and accountability, they will be punished by the electorate at election time (Barton 2006).

Lindberg (2013) argues that policy makers rarely consider the full range of accountability implications when directing adoption of managerial business practices, such as the outsourcing of public service delivery which results in public service delivery networks. He argues that notions such as accounting for developing and maintaining relationships are mostly not included in legal and political accountability measures. If the effective functioning of a network resulting from outsourcing arrangements is primarily reliant on strong network relationships, traditional legal and political accountability measures do little to enhance the effective functioning of the network. He contends that actors in a network can misuse legal and political accountability to further personal agendas (Lindberg 2013).

Haynes & Lynch (2013), in their study on partnerships in the UK educational public sector, found that partnerships imposed by central and federal governments do not work and only superficial compliance with past policy interventions was achieved. They found that whilst central funding can facilitate and incentivise partnerships, these partnerships are not sustained once the funding is discontinued. They conclude that simple models of collaboration initiated at the local level and derived from communally identified needs are far more effective and sustainable than complex and centrally imposed partnerships. They postulate that where centrally imposed partnerships are imposed policy levers, such as clear performance measures and inspections, are required to monitor the effectiveness of these partnerships (Haynes & Lynch 2013).

Ball, Broadbent & Jarvis (2006), in their case study of one Canadian and one UK local authority's waste management practices, found that an improvement in the Canadian council's waste management practices was the result of pressure from the central government to reduce waste disposal to landfill and environmental groups and resident pressures to improve waste management resource recovery and recycling practices. They observe that a combination of these stakeholder pressures resulted in council employees becoming increasingly committed to environmental issues.

The combination of political and social pressures resulted in the Canadian council entering into a partnership with a private waste management company to recover energy from the waste stream. This resulted in contracts being drawn up between the council in the case study and the waste management service provider which prescribed waste reduction targets. Targets in the outsourcing contract did not meet targets prescribed by the central government. The authors found that operational factors related to such inappropriate contracts may impede improvement of waste management practices and reporting. They remark that managers were unhappy to report performance against sustainability targets due to problems with the long-term nature of the outsourcing contract not being able to respond to changing waste reduction targets in a dynamic regulatory environment.

Both the UK and Canadian cases describe a constraint in funding available to local government to respond to technical demands in response to pressures to improve waste management practises. The authors remark that pressure from the central government was brought to bear on UK councils to build long-term waste service solutions rather than avoiding the generation of waste in the first place. In order to reach waste reduction targets and limitations on borrowing powers, external solutions such as large-scale incineration through public-private partnerships become attractive. They found that UK councils are under increasing pressure to apply for funding under the Private Funding Initiative (PFI) scheme.

Ball, Broadbent & Jarvis (2006) argue that from the waste authority's perspective the request to contractors for waste data should be reasonable; in the short term, best-practise approaches should be adopted with the development of specific tools over the long term to collect waste data and improve waste data systems (Ball, Broadbent & Jarvis 2006).

2.4 Why do LGAs outsource waste management services?

Feiock (2013) suggests that LGAs have natural response preferences when confronted by policy interventions imposed by higher levels of government. A study of accountability consequences arising from public policy directives to undertake outsourcing initiatives will benefit from an understanding of why LGAs outsource waste management services.

From a review of the management literature, the major reasons LGAs outsource waste management services are identified.

2.4.1 Financial management, cost savings, cash flow and economic regulation

A number of studies on outsourcing are in agreement that the primary motivator for outsourcing in both the private and public sector is cost saving (Chalos & Sung 1998; Lacity, Hirschheim & Willcocks 1994; Warner 2011; Zhu, Hsu & Lillie 2001).

Fixed costs can be replaced with a variable pricing structure, such as the elimination of the fixed cost of an in-house person providing support services. The budgeting system may become more flexible by replacing lumbering capital budgets with more flexible operating budgets. Outsourcing may accordingly improve budget preparation and financial management processes in these instances (Baird, Schoch & Chen 2012; Carnegie & Baxter 2006; Kloot 2006; Lacity, Hirschheim & Willcocks 1994; Moynihan 2006; Sharma & Gadenne 2011).

Attractive cash flow benefits may result from outsourcing initiatives such as cash receipts from the disposal of assets associated with discontinued in-house services and delayed contract payments (Lacity, Hirschheim & Willcocks 1994). Lacity & Khan (2009) found that companies experiencing financial difficulties often engage in outsourcing to alleviate financial pressures (Lacity & Khan 2009). With a large number of LGAs in Australia having reported serious financial constraints (Dollery, Byrnes & Crase 2007), it is feasible that similar considerations may well play a role in the outsourcing decision of LGAs. A large US study on the outsourcing of public services found that whilst the financial position of local authorities may influence their outsourcing decisions, it is not the overriding influence in their outsourcing decisions (Bel & Fageda 2007).

Unanticipated changes in waste management legislation that can affect operations resulting in negative financial consequences may also prompt organisations to seek an immediate solution from external service providers rather than relying on sluggish internal processes (Denhardt & Denhardt 2000; LGPMC 2009, p. 5; Osborne & Gaebler 1993).

2.4.2 Improving service delivery: Innovation, investment in technology and alleviating resource constraints

Firms that can identify and maintain their competitive advantage by concentrating on core competencies will remain viable (Quinn 1999, 2000; Quinn & Hilmer 1994). In seeking a competitive edge, the trend towards outsourcing over the last two decades accelerated through corporate downsizing, with fewer managers assuming broader spans of control for revenue and cost activities (Chalos & Sung 1998). Some scholars argue that increased service

demands require infrastructure improvements which may prompt local government officials to engage in external service delivery to reduce capital outlays and prevent rate increases (LeRoux & Pandey 2011).

To offer a broader product line in a short space of time to customers, delivery of some of the extended suite of services and products are often outsourced, in some instances even to competitors (Varadarajan 2009). This approach may be applicable, for example, where local government customers' preferences in respect of recycling approaches are not yet fully clear or when such new recycling offerings are urgent. The decision is often driven by a particular LGA's view of its own competitive advantage against other jurisdictions in the region (Minkoff 2013).

Access to technical expertise and the availability of knowledgeable external service providers are important reasons why organisations engage in external service delivery (Lacity, Hirschheim & Willcocks 1994; Quinn 1999; Rosenberg Hansen, Mols & Villadsen 2011; Warner 2011). There is an increasing expectation that technology must drive productivity upwards and costs downwards (Kelly 2000). When direct service delivery does not deliver on this efficiency expectation, outsourcing may become a strategic necessity (Kang et al. 2012; Teng, Cheon & Grover 1995).

The lifespan of knowledge is getting shorter with some technologies becoming redundant within months after announcement, affecting market structures dramatically (Tarn & Chien-Chih 2012). Due to these rapid technological advances, organisations can ill afford to be captive to inappropriate or redundant technologies. LGAs are often hesitant to commit to recycling and resource recovery technologies due to anticipated newer technologies in the process of being developed. These newer technologies are mostly privately owned, resulting in outsourcing initiatives being undertaken (EPHC 2010b, pp. 287 & 288).

2.4.3 Strategic considerations and personal and political influences

The scale of economics and strategic alliances may direct an organisation's effort towards external service delivery rather than in-house service delivery (Varadarajan 2009). LGAs in metropolitan areas increasingly externalise the development of regional landfills to large international waste management companies, while the operations of regional rural landfills are similarly being outsourced to specialist medium-sized private companies (Blue Environment 2011, p. 44).

Outsourcing decisions in the Australian public sector are influenced by staffing and labour issues (Bisman 2008; Purse 2009; Teicher, Van Gramberg & Holland 2006). Because labour costs are not the same in all geographical locations and service environments, organisations can reduce their labour costs by removing themselves from their existing labour costs by outsourcing to environments where these costs are lower (Benson & Littler 2002; Lair 2012). Lair (2012) is of the opinion that outsourcing also allows an organisation to claim that they are not responsible for the actions, or lack thereof, of their contractors. In addition to possible cost savings, improved unionised labour relations may be the result of outsourcing, with unions being forced to move from a defiant position to a pragmatic compliant response (Teicher, Van Gramberg & Holland 2006).

Public managers may be motivated by political, ideological or even nefarious reasons in their outsourcing decisions (Brown, Potoski & Van Slyke 2006). A US study of 134 municipalities found limited evidence of managers being motivated by improving social equity and valuing the common good of the region in their inter-local contracting decisions⁶ (LeRoux, Brandenburger & Pandey 2010). Results from the data suggested that some managers are influenced by career-enhancement ambitions when pursuing inter-council service delivery arrangements (LeRoux & Pandey 2011).

Political influence does play a role in contracting decision making (Bel & Fageda 2007; Levin & Tadelis 2010). Empirical evidence from US studies suggests that cities with a mayor from a conservative ruling party are more likely to outsource public service delivery (Bel & Fageda 2008), whilst strengthening of regional relations and promoting regional integration influence public managers in external service delivery decision making (Warner 2011). Rodrigues, Tavares & Araújo (2012) in their study on 278 continental Portuguese municipalities found that political stability favours in-house service delivery, whilst instability leads to public managers looking to externalise services (Rodrigues, Tavares & Araújo 2012). The ideological orientation of policy makers does not appear to play a major role in outsourcing decision making (Bel & Fageda 2007).

A Bisman (2008) Australian study based on data of 131 mostly New South Wales (NSW) public service organisations, which included 64 local authorities, found that legislative imperatives rather than cost factors are the driving force in deciding to outsource (Bisman 2008). A survey of councillors and management teams at six Victorian local authorities found

⁶ Inter-local contracting refers to the contracting between different local authorities.

that legislative directives related to procurement practices, such as compulsory competitive tendering and best-value procurement, had a critical effect on the shape of the modern Victorian LGA (Kloot & Martin 2007). Some UK studies came to a similar conclusion that legislative imperatives play a major role in the outsourcing practices of local authorities by finding that the waste management practices of local councils, which included outsourcing practices, are closely linked to meeting the European Community (EC) landfill directives (Ball 2005; Walker 2008).

Outsourcing decisions are often taken based on hearsay and media reports of successful outsourcing initiatives in order to enhance corporate citizenship or to eliminate a troublesome service function (Lacity, Hirschheim & Willcocks 1994). In a study on Portuguese local authorities, it was found that managers keep visible human services functions where deliverables are difficult to measure and credit can be claimed in-house, whilst outsourcing more troublesome and easily measurable services such as waste disposal to municipal corporations (Tavares & Camões 2007).

Negative community reaction to resource recovery technology, such as incineration, leads to LGAs being hesitant to invest in such new waste treatment technologies, resulting in LGAs engaging in external contracting in circumstances where negative community perceptions are anticipated (EPHC 2010b, p. 287; Robertson, Lamin & Livanis 2010).

A fear of forced amalgamations and consolidation of LGAs may also influence inter-local outsourcing decisions to protect public managers' and councillors' tenure.⁷ A number of Australian commissions and inquiries have focused on the perceived benefits to be derived from amalgamation and consolidation of local government (Aulich, Sansom & McKinlay 2013).

Studies have found limited evidence of the amalgamation and consolidation model being successful in improving service delivery and reducing costs of public service delivery in the Netherlands and Switzerland. These studies concluded that an outsourcing of services model is more likely to result in improved service delivery rather than purely geographical consolidation of the service (Bel et al. 2010; Bel, Fageda & Mur 2014).

⁷ In the case of Tasmania, the governor, in terms of section 16 by order and on the recommendation of the minister, may adjust a boundary of a municipal area on the recommendation of the local government board (Local Government Act 1993).

From the above, it becomes clear that the outsourcing practices of waste management services by LGAs are influenced by managerial, legal, quasi-legal and moral aspects. The differing contexts of these outsourcing practices in the public sector may have different implications for accountability in different geographical contexts. These possible consequences are accordingly explored as follows.

2.5 How does the outsourcing of waste management services by LGAs impact on their accountability obligations?

The reasons for the outsourcing of different types of waste management services, as discussed in the previous section, influence the types of service delivery arrangements⁸ chosen, which in turn have different implications for corporate governance and accountability (Bel et al. 2010; Bel & Fageda 2008; Bel & Warner 2013; Dijkgraaf & Gradus 2008a; Melenberg, Gradus & Dijkgraaf 2003; Mohr, Deller & Halstead 2010; Zafra-GÓmez et al. 2013).

Burritt (2012) suggests that a study of accounting systems benefits from developing an understanding of the boundaries of accountability where data flow across organisations. Potential accountability problems that LGAs may experience when outsourcing waste management services are identified from the literature.

2.5.1 The impact of privately held information by agents

Information held by the private sector/agent is protected by proprietary laws, whilst information held by government/principals is in the public domain. For accountability relationships to exist in these circumstances; a contractual right to the information held by the agent must be present, that is, there must be a clear and transparent agreement to facilitate the flow of information between agent and principal. The right to information by the principal in such circumstances must be enforceable through punitive measures to ensure the agent complies with the demand for information; that is, enforcement measures are crucial to direct the behaviour of agents in accountability relationships (Burritt & Welch 1997; Flack & Ryan 2005; Forrer et al. 2010; Gray, Brennan & Malpas 2013; Mosher & Mainquist 2011; Perlman 2013; Shaoul, Stafford & Stapleton 2012).

⁸ Service delivery arrangement refers to the type of contracting; for example, arm's-length contracting with a private contractor may be contrasted with contracting with a service-specific incorporated LGA.

Corporate governance principles in the public and private sectors are fundamentally different. For example, whilst secrecy clauses in contracts and governance structures are totally acceptable in commerce, the use thereof in the public sector is incompatible with the requirements of transparency, a cornerstone of democratic accountability. In this regard, a number of studies have found the use of commercial in confidence (CIC) contractual clauses to detract from the accountability relationship in the public sector. For example, Barton (2006) observes that the Bruce stadium contract entered into by the ACT government during the 1990s, which contained secrecy clauses in respect of price, quality and terms of delivery, resulted in a backlash from the electorate. Quiggin (1996), like others, is of the strong opinion that CIC clauses are designed to prevent public scrutiny of public sector projects and that transparency should always be favoured against claims of confidentiality in the case of public contracting (Andon 2012; Ball 2012; Barton 2006; Brown 2013; Kluvers & Tippet 2010; Purse 2009; Quiggin 1996; Shaoul, Stafford & Stapleton 2012).

Thus, whilst the proprietary interests of contracting parties' interest in knowledge are protected in the commercial environment, this should not be at the expense of public benefits in outsourcing regimes of public organisations. Outsourcing often presents an ethical dilemma to local government managers insofar as government-citizen relationships evolve into customer-vendor relationships, with information previously publicly held now being privately held (Andrews & Brewer 2013; Andrews & Entwistle 2013; Aulich 2011; Perlman 2013; Quinn 2000).

Keeler (2013) reviewed five municipal waste collection service contracts over five regional jurisdictions in Florida, USA, in detail. She found that the administrative discretion provided by local government managers to service providers in these contracts often provided opportunities for contractors to frustrate the public interest. She observed that the contracts do not require contractors to comply with public administration ethical norms and standards, nor were transparent public interest processes prescribed. She suggests that the ethical and transparency provisions in service agreements should be elevated from general legal requirements to be included in the scope of the service (Keeler 2013).

2.5.2 Accountability for service delivery performance

LGAs remain accountable for public services even if these services are outsourced. Under their statutory mandate flowing from the various local government acts to account to the

public, they are entitled to high-quality information from their private service providers (Ball 2012; Barton 2006).

Saliterer & Korac (2013) observe that performance measurement in local government has changed fundamentally since the introduction of new public management (NPM) inspired reforms and that fragmented local public service delivery creates external accountability challenges. These external accountability challenges are the result of NPM reforms embracing the notion of privatisation and outsourcing to improve on public service delivery but in the process creating multiple layers of accountability. The accountability challenges arise primarily due to performance measurement problems inherent in the outsourcing process, a principal-agent relationship with ill-defined performance indicators (Ball 2005; Ball & Bebbington 2008; Ball, Broadbent & Moore 2002; Dollery & Manley 2007; Purse 2009; Saliterer & Korac 2013).

Outsourcing of complex and large transactions requires trust in the competence of a supplier (Dekker, Sakaguchi & Kawai 2013), a supplier that can get the job done (Das & Teng 2001). The customer or principal has very little or no control over the service providers' internal processes, resulting in increased reputational and customer relations risks, especially when these outsourced functions relate to critical business operations such as waste collection services. Differing interpretations of supplier contribution and performance as well as lack of performance measures for newly developed processes create strain in the relationships between sourcing organisations and suppliers. Jensen & Stonecash (2005) observe that the public sector experiences difficulties in identifying measurable efficiency outputs, which leads to difficulty in implementing performance measures (Bisman 2008; Jensen & Stonecash 2005; McIvor et al. 2009).

2.5.3 Accountability associated with the outsourcing of waste management services

As discussed earlier in this chapter, to improve services to citizens and reduce costs LGAs undertake outsourcing initiatives. Recent studies on outsourcing of public services question some older findings (Domberger & Piggott 1986; Quinn & Hilmer 1994) which promoted outsourcing of public services as being preferable to direct service delivery (Bel & Fageda 2007, 2008, 2009; Bel & Warner 2009; Hefetz & Warner 2007, 2012; Warner & Hefetz 2012).

Scholars have found that managers often underestimate the costs associated with the sourcing, monitoring and mentoring of multiple external service providers. Islands of hidden costs are created due to management accounting systems of local authorities not being able to adequately track these costs. Bisman (2008) found that Australian public service organisations generally do not measure the financial consequences of outsourcing decisions, most not considering the increased transactional costs associated with outsourcing. Lacity et al. (1994) are of the opinion that outsourcers often fail to understand the consequences of long-term, fixed-fee contracts, resulting in their not sharing in the benefits of price and performance improvements. Core competencies, such as strategic planning and development in critical service areas like waste collection and disposal, may be outsourced due to political pressure, and external service providers may not be able to deliver on strategic outsourcing expectations, for example, the supply of critical waste data. In these circumstances, it is conceivable that conflicts of interest may lead to a lack of willingness to account for critical waste data by both public managers and service providers to LGAs (Johnstone 2002; Lacity, Hirschheim & Willcocks 1994; Quinn & Hilmer 1994; Tarn & Chien-Chih 2012).

Merickova & Nemec (2013) conducted a number of studies over a decade on the outsourcing of waste collection and disposal services by Slovakian municipalities. Their 2010 survey comprised a sample of 141 municipalities. They found that the outsourcing of these services did not result in increased efficiency and that in-house service delivery appears to deliver superior results. They concluded that too few bidders tender for waste management contracts at the local level and that dramatically improved accountability measures are required to improve the socio-economic environment through developing competition in the waste management industry (Merickova & Nemec 2013).

In 2010, 54% of the Australian waste and recycling market was dominated by less than one percent of the companies' active in the industry. In contrast with the findings of Merickova & Nemec (2013), the Australian National Waste report (2010) argues that whilst this concentration may limit competition, the large companies are better suited to collate data as part of their informed investment decision processes, which in turn will result in improved national waste data reporting (EPHC 2010b, p. 229).

The continuing demand for new and improved public services requires new investment in technologies, such as advanced waste transfer stations and resource recovery facilities. As old landfill sites are increasingly closed due to air and space constraints and constraining

licensing conditions, an increasing number of LGAs are forced to outsource their disposal services to neighbouring councils or private operators. This creates new and expanded demands on public managers to measure the performance of these initiatives. Where outsourcing initiatives fail to live up to performance expectations, it may be tempting for public managers to divest themselves from the responsibility to account for the failed or under-performing initiatives (Ball 2012; Barton 2006; Brown 2013; Greve 2001; Laking & Norman 2007).

2.5.4 Accountability to a wide array of stakeholders

Gray's (1992, p. 401) 'right to receive information' when considering waste management services provided by an LGA becomes problematic due to conflicting demands from a wide range of stakeholders, such as environmental activists on the one hand demanding environmental accountability through environmentally friendly waste management services and local government customers demanding proof of cheap garbage removal, whilst the Australian federal government requires accountability in respect of waste types and volumes recycled and disposed of. The environmental management systems (EMS) of LGAs must accordingly facilitate reporting to a diverse group of stakeholders, both in monetary and narrative terms, against predetermined benchmarks by collating both internally generated and externally sourced waste data (Ball, Broadbent & Moore 2002; Beach 2009; Bebbington, Brown & Frame 2007; Bebbington et al. 2007; Bebbington & Gray 1993; Bebbington & Larrinaga-Gonzalez 2008; Bellringer, Ball & Russell 2011; Gibson 2012; Kluvers & Tippet 2010, 2011; Lourdes, Vicente & Caridad 2012; Qian & Burritt 2007, 2009; Qian, Burritt & Monroe 2011; Sciulli 2011; Zaman 2012).

The scope and nature of waste data required by LGAs from multiple external service providers are comprehensive, complex and may change rapidly, resulting from stakeholders such as the Australian federal government's expanded expectations due to policy changes. Service providers may also feel that their accountability obligation with respect to the reporting of waste data is adequately met through reporting to the EPA.

2.5.5 The consequences of collaborative outsourcing and relational contracting on accountability relationships

Local government reforms in Australia include a wide range of new service delivery arrangements, such as the merging of municipalities, substantially redrawing municipal

boundaries, private contracting and shared service models (Aulich, Sansom & McKinlay 2013; Dollery & Akimov 2008b; Dollery, Akimov & Byrnes 2009; Dollery, Grant & Akimov 2010; Dollery, Hallam & Wallis 2008; Dollery, Kortt & Grant 2012).

Shared waste management service models are based on collaborative arrangements, resulting in incomplete and complex contracts with the right to information often not adequately entrenched in such contracts. Qian, Burritt & Monroe (2011) found that some service providers to local government do not have the capabilities to deliver on expectations to supply waste data. In such circumstances, local authorities may rely on relational contracting to improve the situation. In relational contracting, trust plays a more important role than in command and control governance systems. Relational contracting may also be considered more suitable than a transactional approach in projects where volatility and uncertainty is anticipated (Arranz & Fdez de Arroyabe 2012; Bertelli & Smith 2010; Brown, Potoski & Van Slyke 2006; Brown, Potoski & Van Slyke 2007, 2010; Cruz & Marques 2012; Girth 2014; Kluvers & Tippet 2010, 2011, 2012; Longo & Barbieri 2013; Qian, Burritt & Monroe 2011).

Verner & Abdullah (2012) suggest that the credibility of service providers must be considered at the outset of trust-based outsourcing relationships to avoid those service providers that do not prescribe to the principal's moral values:

It is difficult for a client project manager to anticipate and deal with 'vendor's moral hazard'. Fraud and lies can be difficult to detect. Good client project management practices can help detect some fraudulent misrepresentations. It is imperative that the client does their homework on the vendor and the members of the vendor team, and having begun with good requirements [*sic*], monitors progress carefully (Verner & Abdullah 2012, p. 876).

Albrecht et al. (2014) state that how to measure and manage moral hazard between the participants in a network of actors is a complex issue. They argue that it is often difficult to distinguish between functions within networks and individuals in the network. They concluded from the results of two European case studies on the impact assessment of regional governance networks that if the functioning of a regional network is reliant on individuals in that network, a method must somehow be developed to measure the credibility of the relationships. They suggest that an interview-based assessment may be appropriate but caution that the impact assessment approach of regional governance networks is still in its

infancy and remains a costly undertaking due to the limited availability of grounded theory and proven methods.

This view is shared by Doberstein (2013). The results of his study on 15 Canadian public sector networks indicated that these networks are mostly prescribed by higher levels of government. The study found that networks governed by professional managers rather than elected officials function more effectively. Financial incentives to adopt meta-governance mechanisms were found to be strong incentives to strengthen accountability. The study recommended that higher levels of government must show a genuine interest in the opinions of local administrators in crafting meta-governance mechanisms for regional networks. The study concluded

Accountability and legitimacy of network governance requires a complementary framework of vertical, horizontal and social accountability mechanisms (Doberstein 2013b, p. 605).

A relational approach to contracting may lead to a lack of information flowing between closely connected business partners. Close connections between public managers and service providers may be the result of social network affiliations, membership in collaborative initiatives, partnership arrangements or varying degrees of investment in such service providers. Yang, Hsieh & Li (2010) found that Taiwanese local authority managers are more likely to have a close connection with their service providers than public managers in general. Girth (2014), as well as others, found evidence that even where contractual sanction measures exist, US public managers often do not enforce these sanctions, in some cases rewarding service providers although performance problems exist. Where public managers are thus closely connected to their service providers, they are hesitant to hold them accountable for their actions (Forrer et al. 2010; Heinrich, Lynn & Milward 2010; Kluvers & Tippet 2010, 2011, 2012; LeRoux, Brandenburger & Pandey 2010; LeRoux & Carr 2010; Longo & Barbieri 2013; Perlman 2013; Shaoul, Stafford & Stapleton 2012).

Zeemering (2012), in his 2005 study based on 47 semi-structured interviews conducted with city council members and mayors in Michigan, USA, concluded that the assessment of the performance of inter-local agreements will be a critical task for public administration researchers in the years ahead. His narrative analysis of the interview data revealed 12 distinct concerns that city council members expressed with regard to public accountability when entering into inter-local agreements. He concluded that consideration of the

performance of inter-local agreements should include the assessment of what he coins the ‘democratic anchorage’ of these agreements. He suggests that public managers are well advised

...to consider how elected officials might provide a link of democratic accountability between the citizens within their city and the service provided through the ILA [inter-local agreement] (Zeemering 2012a, p. 98).

2.5.6 The impact of labour relations on accountability relationships

Outsourcing in the Australian public sector resulted in a change in the employment model to shorter and more temporary forms of employment. Some scholars argue that training, career development opportunities and conditions of employment are negatively impacted by outsourcing. McKinlay (2011) found that UK public managers have become concerned about staff resistance during the last decade when deciding between direct service delivery and outsourcing. Some studies found that redundancies and transfer of staff from the principal to agent negatively affects the moral of the workforce and anticipated improvement of technical expertise through outsourcing is often not realised due to inappropriate and incomplete contracts in respect of labour requirements, sharing resources with the service providers’ other customers and overworked service provider staff. Disgruntled employees may therefore negatively affect the flow of information from primary service providers to the ultimate stakeholders, such as the Australian federal government (Benson & Littler 2002; Bisman 2008; Lacity, Hirschheim & Willcocks 1994; McKinlay 2011; Purse 2009; Teicher, Van Gramberg & Holland 2006).

2.6 Best practises derived from outsourcing frameworks in the literature

The move away from direct delivery of public services to increasingly outsourcing waste management services to the private sector, other public entities, municipal corporations or non-profit entities requires substantial redesign of management models and controls. Promoting best practises⁹ requires better scholarship to understand how exemplary systems work (Cristofoli et al. 2010; Purse 2009; Sanger 2008).

⁹ Refer to Chapter 1 for a discussion on best-practise waste management networks as contemplated by The Tasmanian Waste Strategy.

McIvor (2008) suggests that theoretical frameworks for successful outsourcing derived from the literature can be used to develop best-practise management systems. Vagadia (2012) proposes the most recent comprehensive framework for successful outsourcing developed by consolidating his findings with concepts derived from earlier scholarly works, such as McIvor (2008), Kakabadse & Kakabadse (2005), Lacity and Willcocks (1994), Quinn & Hilmer (1994) and others.

Vagadia (2012) proposes eight key factors that are required for successful outsourcing. These success factors are presented in the table on page 46. Where other frameworks for successful outsourcing are in support of his individual success factors, such support is indicated on the table, with a brief discussion of the accountability provisions of these frameworks following the table.

Quinn (1999, 2000) developed a broad framework for strategic outsourcing from what is considered as best practise in large multi-national commercial organisations (e.g. Dell). He suggests that strategic outsourcing is a top management function, especially when outsourcing new-product innovation and business processes. His framework suggests that the principal-agent relationship must be managed in such a way that both parties benefit equally from the relationship; that is, goal congruence becomes a governance mechanism. Accountability for strategic outsourcing is achieved through managing the relationship rather than the contract and through the transparent communication of knowledge and information through open, mutual databases.

Zhu, Hsu & Lillie (2001) take a process view of the outsourcing initiative and suggest extensive codification of the process through the use of business plans, transition plans, employee separation plans, communication plans and a transition checklist. Their framework is relevant to this study in so far as the development of action plans is prescribed by The Tasmanian Waste Strategy (Environmental Protection Authority 2009, pp. 5, 6, 8, 10, 14 & 18).

**Table 1: Vagadia's (2012) success factors for outsourcing
and support from other frameworks for successful outsourcing**

Success factors for outsourcing	Support from other frameworks for successful outsourcing
1. Develop strong, yet flexible contracts that aid in building trust.	(Ali, Ali Asghar Anvary & Ali 2008; Hassanain & Al-Saadi 2005; Lacity & Khan 2009; McIvor 2008; Verner & Abdullah 2012; Zhu, Hsu & Lillie 2001)
2. Develop a governance framework for control, monitoring, dispute resolution and relationship building at all levels.	(Ali, Ali Asghar Anvary & Ali 2008; Hassanain & Al-Saadi 2005; Lacity & Khan 2009; McIvor 2008; Verner & Abdullah 2012)
3. Implement effective controls to enable monitoring of performance, guide vendor behaviour and develop trust.	(Ali, Ali Asghar Anvary & Ali 2008; Hassanain & Al-Saadi 2005; Lacity & Khan 2009; McIvor 2008; Quinn 1999; Verner & Abdullah 2012)
4. Build commitment and mutual dependence, which drive both parties to perform contracted tasks to a high level of performance. Motivate performance beyond the contract.	(Lacity & Khan 2009; McIvor 2008; Mohr, Sengupta & Slater 2011; Quinn 2000; Verner & Abdullah 2012; Zhu, Hsu & Lillie 2001)
5. Align the goals and objectives both within the client organisation and between the client and vendor, using the concept of consensus building, based on an understanding of the unique personal drivers within each organisation.	(Ali, Ali Asghar Anvary & Ali 2008; Hassanain & Al-Saadi 2005; Lacity & Khan 2009; McIvor 2008; Mohr, Sengupta & Slater 2011; Quinn 1999, 2000; Verner & Abdullah 2012; Zhu, Hsu & Lillie 2001)
6. Build individual and institutional trust to enable parties to perform services as prescribed in the contract.	(Lacity & Khan 2009; Mohr, Sengupta & Slater 2011; Verner & Abdullah 2012)
7. Manage effective collaboration and knowledge sharing between the parties through individual and group interaction.	(Mohr, Sengupta & Slater 2011; Quinn 1999, 2000; Verner & Abdullah 2012; Zhu, Hsu & Lillie 2001)
8. Use communication as a key linking tool to manage change and to mitigate risks.	(Ali, Ali Asghar Anvary & Ali 2008; Lacity & Khan 2009; McIvor 2008; Mohr, Sengupta & Slater 2011; Quinn 1999, 2000; Verner & Abdullah 2012; Zhu, Hsu & Lillie 2001)

Hassanain & Al-Saadi (2005) propose a framework for the outsourcing of asset management services for municipalities derived from a survey of Saudi Arabian municipalities. They found that successful outsourcing of asset management services in the local government sector are preceded by the determination of the principal's own goals, risks and benefits related to the function to be outsourced. Their framework focuses strongly on the process management of outsourcing contracts to monitor and improve the agent's performance. They suggest the implementation of formalised controls supporting procurement processes, for example, evaluation of contractors. Their process governance framework for implementing

and reviewing the outsourcing initiatives is codified in action plans, such as transition and improvement plans.

Ali et al. (2008) expanded on the framework proposed by Hassanain & Al-Saadi (2005) and derived a conceptual framework for outsourcing in the public sector from their findings of a survey of Iranian public entities. They found that an understanding of both strategic long-term and operational short-term goals regarding core activities by the principal, prior to developing selection criteria, is required to achieve successful outsourcing. They found a sound communication process, top management support and a fully structured contract to be essential for successful outsourcing. Their framework provides an empirical foundation for the Vagadia (2012) application of achieving accountability through formal contracts in the public sector. Clear contractual performance measures (e.g. the requirement to supply data contained in contracts) strengthen the accountability of agents in outsourcing relationships both in the public sector and the private sector.

McIvor (2008) established a framework for the successful implementation of outsourcing strategies. He proposes his framework by integrating TCE concepts with a resource-based view (RBV)¹⁰ of the organisation and by building on lessons learnt from real case interviews with managers of for-profit entities engaging in outsourcing strategies. His framework specifies that the underlying causes of poor performance and how these processes link with other processes in the organisation should be understood prior to embarking on an outsourcing initiative. Managers must also understand the potential for opportunism prior to outsourcing the process by asking questions such as: Will it be difficult to establish performance measures and what happens if the supplier fails?

The McIvor (2008) framework is relevant to this thesis due to the fact that waste management services are often difficult to measure and suffer from high asset specificity. His framework suggests that processes such as the demand for information should be codified so that the associated tasks, specifications and performance levels can be communicated clearly to suppliers. He suggests that the contract and relationship strategy should be used as complements. The management of the relationship with the supplier becomes an essential complement for dealing with gaps in the contract, particularly in the case of complex outsourced processes.

¹⁰ These concepts are elaborated upon later in this chapter.

Lacity & Kahn (2009) reviewed 86 outsourcing studies and concluded that successful outsourcing is dependent on a sound decision to outsource as well as sound contractual and relational governance measures. They found that the involvement of senior managers and rigorous evaluation processes are associated with higher levels of successful outsourcing. More contract detail, shorter-term contracts and higher-dollar-valued contracts are positively related to successful outsourcing. Trust, norms, open communication, open sharing of information, mutual dependency and cooperation are always associated with higher levels of outsourcing success. Their findings provide extensive empirical support for the Vagadia (2012) framework.

Mohr et al. (2011) proposed a generic framework for information technology outsourcing and business process outsourcing to assist managers to decide whether a function should be outsourced and, if so, which type of outsourcing makes the most sense. Their framework directs the structure and management of business functions, including outsourcing, to be aligned to the underlying needs, resources and desired outcomes to maximize benefits and minimize risks.

Mohr et al. (2011) found that when economies of scale exist and when the transfer of explicit, codified knowledge is involved, straight-forward transactional ‘lift and shift’ outsourcing arrangements yield cost savings and efficiency. In contrast, when the transfer of know-how is more tacit, longer-term strategic outsourcing brings the client and service provider closer together to deliver knowledge transfer and associated value enhancements. In terms of their framework, waste management services, such as garbage collection services, are more likely to be outsourced in terms of arm’s-length contracts than waste disposal services that are more likely to be outsourced to trust-based partnerships due to the extent of investment required and critical nature of the capital asset. Accountability requirements for the different service types are accordingly markedly different.

Verner & Abdullah (2012) expanded on earlier research of risk factors underlying outsourced information technology (IT) project failure. They used the findings from a case study of a large, failed outsourced project and the results of prior research to develop a conceptual risk-based framework for effective outsourcing of IT projects. Their risk-based, project-orientated framework differentiates between risks related to the outsourcing parties and the project.

The changing waste management environment is characterised by new and improved recycling and disposal facilities. Verner & Abdullah’s (2012) framework is relevant, as it

provides guidance where high technological risks are associated with such projects and parties to the projects.

2.7 Governance mechanisms and accountability relationships

Feiock (2013) suggests that a study of policy interventions from higher levels of government that impacts on the operations of LGAs benefits from an understanding of what mechanisms are available to LGAs to respond to such policy interventions (Feiock 2013). To examine this, the following dimensions from the Vagadia (2012) framework are identified as best-practise mechanisms by which principals can hold agents accountable in contractual environments: alignment of goals and objectives, communication and knowledge sharing, contract management and managing and monitoring of relationships.

2.7.1 Alignment of goals and objectives

All role players must fully understand the complexities and constraints associated with data collection related to specific aspects of the particular waste management service to be outsourced to prevent unclear instructions issued to and accepted by the suppliers, especially when inter-local contracting or collaborative initiatives are contemplated (McIvor 2008). The Vagadia (2012) best-practise outsourcing framework expands the notion of goal congruence between principal and agent to include alignment within both firms' strategic objectives with their respective internal stakeholders (Vagadia 2012).

Alignment of accountability goals between principals, agents and stakeholders are accordingly considered from the literature.

2.7.1.1 Alignment between principal and service provider

According to Quinn (2000), organisational boundaries are an impediment to knowledge sharing. The underlying assumption to a successful outsourcing relationship is that the parties to the relationship are indeed willing to share such knowledge. The contracting parties often do not want to share information with each other because they have different goals and objectives. The Quinn (2000) framework acknowledges that contracting parties may have different goals but suggests that this limitation can be overcome by developing a shared identity through joint development of innovative products and services. The McIvor (2008) framework refers to anecdotal evidence of a Dell case study and suggests that an extreme

approach of virtual integration must be followed where this shared identity is critical to the strategic objectives of both organisations (McIvor 2008; Mohr, Sengupta & Slater 2011; Quinn 2000).

Warner (2011), in a study on outsourcing arrangements of 1,747 US municipalities, warns that these cooperative arrangements require new governance tools due to the lack of private sector competition in such complex networks. Feiock, In Won & Hyung (2012) conducted a survey based study on 38 city and county governments in Florida, USA, with regard to outsourcing and collaborative economic development arrangements. They observed that service collaboration administrative networks naturally develop along the same lines as political networks, and collaboration between jurisdictions develop between a small number of jurisdictions, some with resources and some without. They posited that this may be the result of politically vulnerable administrators seeking to protect their tenure. They concluded that this is consistent with a resource dependency view of public sector networks and will result in information sharing inefficiencies. It would accordingly be dangerous to assume that collaborative arrangements necessarily imply that actors in the network share the same goals and objectives when giving and demanding waste data and that the establishment of such networks will necessarily result in improved data collection systems (Feiock, In Won & Hyung Jun 2012; Goliday 2012; Warner 2011; Zeemering & Delabbio 2013).

2.7.1.2 Alignment with stakeholder values

Stakeholder management dictates that organisations must acknowledge the moral values of organisations and individuals that are in a position to influence their activities, and it accordingly places an obligation on the organisations to respond to such stakeholders. Stakeholder identification and engagement becomes a managerial necessity because public managers in charge of contracting must balance competing stakeholder values in politically charged environments whilst remaining accountable to the public (Burritt, Hahn & Schaltegger 2002; Deegan 2013; Dollery & Manley 2007; Donaldson & Preston 1995; Farneti & Guthrie 2009; Feldman & Perez 2012; Frooman 1999; Michels 2011; Reed et al. 2009; Ryan, Stanley & Nelson 2002; Yang & Kathe 2005).

Heinrich, Lynn & Milward (2010) express the concern that formal government institutions may not be able to retain control and uphold obligations to citizens in complex governance arrangements involving multiple, third-party actors. Lengthening chains of delegation and an increasing divide between the origins of government activity and the point of service delivery

may result in the public interest not being adequately served. Calabro & Torchia (2011) hold a similar view of outsourcing arrangements in the local public sector. They found that outsourcing in local government is complicated by the presence of dynamic relationships between multiple principles and agents (Calabro & Torchia 2011; Heinrich, Lynn & Milward 2010).

Collaborative arrangements such as municipal corporations or other mixed firms may, however, lead to contradictory pressures within the LGAs in a shared jurisdiction. Balancing efficiencies such as commercial gain with the public interest leads to a high degree of managerial conflict between these polarised goals. Strongly held personal beliefs and self-serving interests often influence decision making in such agency relationships. Political interference may result in the appointment of local government managers, or managers of their special-purpose vehicle service providers that are more sympathetic to political stakeholders' goals than the public interest (Andrews, Boyne & Walker 2006; Garrone, Grilli & Rousseau 2013; Girth et al. 2012; Jensen & Meckling 1976; LeRoux & Pandey 2011; Lubell, Feiock & de la Cruz 2009; Niskanen 1971).

Bryson (2004) suggests the adoption of a formal process to identify stakeholders and their expectations. He argues that the resulting stakeholder value mapping greatly assists in providing information on conflicting values and preferences. Environmental interest groups' expectations of improved environmental reporting stand in contrast to customers' expectations of improved and affordable service delivery. A stakeholder value-mapping approach allows public managers to identify contrasting views and facilitates moral and ethically sound decisions that contribute to the public good (Berner, Amos & Morse 2011; Brown, Potoski & Van Slyke 2006; Bryson 2004; Mitchell, Agle & Wood 1997; Nassreddine & Anis 2012).

2.7.2 Communication

Communication is considered a key success factor in governing successful outsourcing relationships. A properly functioning working relationship enables coordination of activities between the client and service provider. Accountability is strengthened by properly functioning communication channels to facilitate the flow of information. Communication is therefore the most fundamental process to establish and maintain such working relationships (Burritt & Welch 1997; Reid 2012; Wüllenweber et al. 2008).

Feiock (2013) argues that uncertainties limit rational actors' options and prevent authorities from reaching coordinated decisions. A cornerstone of innovative government is the development of communicative tools to improve control over service providers whilst improving responsiveness to citizens. Quinn (2000) suggests that innovation in the outsourcing environment must be supported by an open-information capability that places all participants on the same footing to prevent actors from taking strong positions on their own ideas. All ideas become everybody's ideas (Feiock 2013; Hefetz & Warner 2007; Quinn 2000).

The sharing of information is reliant on close collaboration between principals and agents. Dekker, Sakaguchi & Kawai (2013) observe that collaboration between firms stems from the need to coordinate tasks, solve problems, share knowledge and in general to influence behaviour. Coordination or goal congruence through reciprocity and mutual dependency can only be established through clear formal communication between the seller and the buyer. The Lacity & Khan (2009) framework identified 44 studies that found that trust, norms, open communication, open sharing of information, mutual dependency and cooperation are always associated with higher levels of outsourcing success (Dekker, Sakaguchi & Kawai 2013; Lacity & Khan 2009; Zhu, Hsu & Lillie 2001).

Quinn & Hilmer (1994) observed that successful outsourcers such as Nike find it absolutely essential to have close contact and rapport at both the floor level and the top management level. Face-to-face meetings at the top management level are important at the problem definition stage, and ongoing interaction reinforces commitment and shared identity. Rai et al. (2012), in their study of 335 business process outsourcing ventures, found that an up-front information exchange between decision makers and staff reduces the need for detailed contractual obligations. They concluded that information exchange through relational contracting such as meetings may be preferable to enforcing information exchange by means of contractual conflict resolution (Quinn & Hilmer 1994; Rai et al. 2012; Vagadia 2012).

The outsourcing frameworks stress the importance of effective communication and knowledge sharing as a prerequisite for successful outsourcing. Zhu, Hsu & Lillie (2001) summarise the problem succinctly and suggest a solution as follows:

The best way to counter and potentially eliminate misinformation from spreading within an organization is to develop and implement an aggressive communication

plan. The communication plan should be designed to provide timely, detailed and accurate information on a planned basis (Zhu, Hsu & Lillie 2001, p. 376).

Communication and knowledge sharing in regional networks are reliant on top managements' active commitment to these networks. Minkoff (2013) concluded from his study on 92 US cities that municipalities outside of these informal network centres may find it difficult to cooperate effectively with municipalities in the network. LeRoux, Brandenburger & Pandey (2010) found that public managers who attend meetings and serve on committees in regional associations find it beneficial in terms of building relationships with cooperation partners. Delabbio & Zeemering (2013), in a survey study of local authority managers in five US states, found that managers that show an aversion to risk taking are less inclined to actively cooperate and contribute to inter-local service delivery innovation (Carr & Hawkins 2013; Delabbio & Zeemering 2013; LeRoux, Brandenburger & Pandey 2010; Minkoff 2013).

Bigdeli, Kamal & de Cesare (2013) conducted structured and semi-structured interviews with six participants in two different LGAs in England with regard to inter-organisational electronic information sharing. Their findings highlighted that the LGAs experienced grave pressures related to legislative changes and resulting requirements for information sharing across organisations. Whilst they do not claim generalizability of their findings to other LGAs, they concluded that the findings from the two cases were so similar that the lessons they learned may be helpful to other LGAs, practitioners and researchers. They provide the following recommendations:

1. Central governments should assist LGAs by providing adequate funding, improve IT infrastructure and enhance the level of IT skills and knowledge of employees.
2. The expectation of public organisations to reduce costs through inter-agency collaboration necessitates strong leadership to implement these changes.
3. Corporate IT application systems are currently disintegrated and information across databases is duplicated. Information sharing is impossible, and new IT systems and business processes that cross organisational boundaries are required to facilitate secure and effective sharing of information.
4. Most managers do not understand the value of information and do not consider the quality of information as important. The lack of information sharing across

organisations is widespread, and inadequate attention is given to security and confidentiality. It is suggested that a more professional approach to information sharing and management should be adopted.

Bigdeli, Kamal & de Cesare (2013) suggest that the state and central governments can play an important role in strengthening inter-organisational IT systems through funding and training of employees, which will facilitate a more professional approach to secure and confidential information sharing across agencies (Bigdeli, Kamal & de Cesare 2013).

2.7.3 Managing contracts

In the absence of arrangements solely built on trust, an unlikely scenario in the public sector, a viable, risk-sharing contract is essential (Chalos & Sung 1998). The outsourcing frameworks suggest that organisations that sign strong contracts are generally more satisfied with their outsourcing ventures than those that do not.

The formal contract binds actors legally to mutual action and provides a formal mechanism to resolve external issues of concern to all parties (Feiock 2013). Feiock (2013) argues that a formal contract becomes an enabling tool that may limit transaction costs associated with developing, negotiating and enforcing agreements. A counter-argument is that formal contracting for specific public services characterised by high asset specificity and which are difficult to manage greatly increase the transaction costs associated with the contract¹¹ (Bel & Fageda 2007, 2008, 2009; Brown, Potoski & Van Slyke 2006; Brown, Potoski & Van Slyke 2010).

Brown, Potoski & Van Slyke (2007) argue that government contracts involving highly asset-specific services; for example, waste disposal requires more contract detail in response to risks associated with early termination of the contract. They propose that more complete contracts are advisable when the cost of renegotiation is high, such as when the parties are experiencing cooperation problems. In contrast, a less complete contract may be suitable when the cost of renegotiation is low, such as when the parties trust each other. The risks associated with inadequate provision of data determine the extent of contract detail and contractual obligation required to hold the service provider accountable. The costs related to managing contracts and the costs to monitor and manage relationships are difficult to identify and measure in order to decide on the most suitable approach to hold waste management

¹¹ Refer to a discussion on TCE later in this chapter.

suppliers accountable for data (Brown, Potoski & Van Slyke 2007; Carr & Hawkins 2013; Cruz & Marques 2012; Girth 2014; Heiskanen, Newman & Eklin 2008; Verner & Abdullah 2012).

The outsourcing frameworks generally associate long-term contracts with a greater measure of success. Lacity, Hirschheim & Willcocks (1994) hold a contradicting view that shorter term contracts are more positively associated with outsourcing success. This view is supported by Mohr, Sengupta & Slater (2011), who argue that principals are better suited by a shorter-term contract until such time as trust develops. The appropriate term of a contract depends not just on the type of service that is outsourced but also managerial skills in outsourcing and positive results from managers' past experiences. Outsourcing of highly specified assets and difficult-to-measure service is a specialised managerial skill that takes time to develop. It may be argued that public managers should avoid entering into longer-term agreements. Where a combined approach of transactional and relational contracting based on trust is contemplated, managers must avoid entering into agreements which last longer than their anticipated tenure (Carr & Hawkins 2013; Lacity, Hirschheim & Willcocks 1994; Lacity & Khan 2009; Lamothe, M & Lamothe 2012; Mohr, Sengupta & Slater 2011).

2.7.4 Monitoring and managing relationships

Kakabadse & Kakabadse (2003) conclude that the difference between high-performance and average-performance companies can be found in the manner in which they establish constructive relationships with suppliers. Bertelli & Smith (2010) argue that contract management and relationship management are both important dimensions in a governance framework:

The key to governance in a contracting state, therefore, is to effectively manage both the formal contracts and the relationships with contractors. The government (as principal in these contracts) maintains credibility with the pool of potential and existing contractors as well as the citizens on whose behalf the contracted tasks are performed by fostering relationships with contractors who meet public goals while ending relationships with those who do not. This simple insight, we contend, is a core principal in understanding modern public management and the drive for efficient service provision embodied in NPM (Bertelli & Smith 2010, p. 128).

Relational contracting arrangements move beyond a transactional mindset towards a mutually beneficial, trust-based relationship. A contract management capacity in local government is often lacking, with a relational approach being the only viable option. In these circumstances, relational governance can facilitate knowledge sharing. In explaining to a service provider why data are needed, more commitment to the supply of such data may be forthcoming. Although some studies on outsourcing in the private sector find a positive correlation between relational attributes and successful outsourcing, public managers should be wary of relying only on this approach. Whilst there is an anticipation of a long-term relational contracting arrangement at the outset, the risk of a breakdown of trust in relationships always exists and, in such an event, the only recourse may be a strong viable contract. Although mediation and arbitration may be a viable option to resolve conflict, the threat of sanction in terms of the contract should be present to allow public managers leverage when engaging in informal means of dispute resolution (Bertelli & Smith 2010; Girth 2014; Girth et al. 2012; Heiskanen, Newman & Eklin 2008; Lacity & Khan 2009; Lamothe, M & Lamothe 2012; Poppo & Zenger 2002; Yang, Hsieh & Li 2010).

Collective problems such as regional waste management are often responded to through outsourcing arrangements based on collaboration and partnerships. In this environment, contracting is often built on relational aspects, such as trust and reciprocity, rather than written contracts. The differing juridical and legal environments in regional networks necessitate several rounds of negotiation and dispute resolution to arrive at effective inter-local contractual and working partnership arrangements (Cruz & Marques 2012; Feiock 2013; Lamothe, S, Lamothe & Feiock 2008; LeRoux, Brandenburger & Pandey 2010; LeRoux & Carr 2010; Minkoff 2013; Mohr, Deller & Halstead 2010).

The evaluation of the effectiveness of these networks requires new and different performance management techniques (Albrecht et al. 2014; Amirkhanyan 2010; Andrews & Entwistle 2010; Bae & Feiock 2012; Benton 2013; Mandell & Keast 2007; Zeemering & Delabbio 2013).

Existing fragmented systems require enhanced coordination and strengthening of centralised political and administrative abilities (Zafra-Gómez et al. 2013). How to coordinate and strengthen political and administrative abilities becomes problematic due to the existence of multiple networks in the same jurisdiction, often with overlapping and contradictory policy positions. Lester & Reckhow (2013) argue that advocacy networks within civil society

suffers from an imbalance due to local business-led associations being in direct conflict with community-based organisations attempting to influence global governance. They conclude that these networks are on a 'collision course' (p. 134) to find each other and, even if common interest can be established, institutions at a local level lack the capacity and authority to develop and enhance regional equity policies (Lester & Reckhow 2013).

A US study by Zeemering (2012b) on sustainability collaborative initiatives between city councils found that the success of regional sustainability initiatives are more dependent on relationships between government agencies at a local level rather than vertical interactions with state, national and international actors. The content analysis of 20 cities' policy documents retrieved from their websites found that the policy documents reflect that local government administrators engage with federal administrators in respect of policy, resources and regulation. The cities' policy documents also revealed an understanding by local government administrators of their inter-dependence within local networks. The study observed that the cities' policy documents reflected the existence of multi-level governance relationships. The author recommended that city managers should fully document the management of the governance of relationships within local networks.

Effective waste management service delivery is enhanced by contracting with a service provider that shares similar public values. This requires the establishment of credibility in long-term relationships. On the one hand, it is argued that credibility develops from incentives and an interaction, whilst others would argue it is derived from trust (Bertelli & Smith 2010; Lamothe, M & Lamothe 2012).

The decision with regard to inter-local collaboration or inter-local contracting depends on a number of practical considerations (Durugbo & Riedel 2013). Durugbo & Riedel (2013) argue that a holistic view of the collaborative network should be taken. They developed a theoretical model from prior literature to measure the impact of admitting or rejecting collaborators on the functioning of the network as a whole. They tested their model on six case studies of delivery networks, which included a network in the utility industry. Their findings suggest that outsourcing initiatives based on inter-local collaboration and inter-local contracting should be informed by a transparent assessment of which service providers should be omitted or rejected. Inter-local networks resulting from such initiatives should be developed on clear, objective performance measures to ensure collaborators omitted or

accepted will ultimately result in an optimum mass for the network, in which a win-win situation for customers and service providers is created.

2.8 Limitations of commercially driven outsourcing frameworks in the public sector

Close inspection of the outsourcing frameworks suggest that they have mostly clear commercial and managerial objectives in common; for example, the common success factors in Quinn (1999) are derived from success stories related to large multi-national corporations. The global public services sector developed a herd mentality that resulted from the popularity of outsourcing by these major international corporations without consideration of the fact that the public sector, and more specifically local authorities, may have objectives wider than purely commercial gain (Bisman 2008; Farneti & Guthrie 2009; Gray, Dillard & Spence 2009; Kettl 2000; Kloot & Martin 2001; Kluvers & Tippet 2010, 2011, 2012; Quinn 1999, 2000).

Scholars, for example Quiggin (1994) and Aulich (2011), argue convincingly that even though governments have been urged to adopt external contracting as a measure to improve efficiency, outsourcing may in fact create more problems and may not result in improved public service delivery. Heinrich, Lynn & Milward (2010) hold a similar view and explain that NPM initiatives resulted in a trade-off between flexibility and innovation associated with these initiatives and transparency and accountability associated with traditional bureaucratic structures characterised by central control systems. Hukkinen (1995) observes that the conflicting political and economic interests of waste reduction, recycling, recovery and disposal result in accountability problems in the public sector. The pursuance of sustainability principles and environmental targets in the public sector means that commercial and managerial outsourcing frameworks cannot be blindly adopted due to the limitations inherent in these frameworks (Andrews & Brewer 2013; Aulich 2011; Burritt & Welch 1997; Heinrich, Lynn & Milward 2010; Hukkinen 1995; Quiggin 1994).

Outsourcing affects the giving and demanding of information (Broadbent & Laughlin 2009; Roberts & Scapens 1985) and as such impacts on accountability.¹² Bel, Fageda & Warner (2010) argue that we do not fully understand the impact of initiatives such as outsourcing and privatisation by remarking:

¹² Refer to the definition and discussion of accountability in Chapter 2.

Public choice, property rights, transaction costs, and industrial organization approaches all contribute to our understanding of privatization, but individually each one only captures part of the costs and service delivery equation. Competition, market dynamics, transaction costs, and service quality are also important, but the existing empirical evidence does not allow us to understand their impact fully (p. 573).

Outsourcing is considered a complex environment (Ruzzier et al. 2008). Lacity & Willcocks (2011) came to a similar conclusion than Bel, Fegada & Warner (2010) with reference to IT outsourcing by finding that one single theory alone cannot capture the variety of empirical phenomena. They argue that multiple theories should be utilised to improve the explanatory and predictive power (Lacity & Willcocks 2011).

McIvor et al. (2009) suggest that frameworks for successful outsourcing should not only be developed by analysing outsourcing experiences of companies, but theoretical frameworks should also be developed and tested in a practical setting (McIvor et al. 2009).

Whilst the general outsourcing frameworks may provide a sound managerial basis for holding service providers in outsourcing relationships accountable for their performance, an understanding must be developed of the reasons why best-practise outsourcing relationships may not result in improved public service accountability.

Hukkinen (1995) argues that commercial outsourcing of waste management services result in political and social tensions between actors in regional waste management networks. Frameworks for the outsourcing of waste management services need to consider aspects beyond the economic and efficiency principles underlying outsourcing frameworks in general and should include aspects such as social choice and prevention of managerial opportunism. Theories interpreting the actions and behaviour of actors in the context of local governments' outsourcing of waste management or similar services are accordingly considered.

2.9 Theories relevant to outsourcing relationships in the public sector

Rosenberg Hansen, Mols & Villadsen (2011), in a study of 98 Danish municipalities, considered why these public organisations outsource and whether they are satisfied with the results. The results of their study indicate that decision making and the perceived success of external service delivery versus internal service delivery in municipalities are explained by resource-based, neoclassical economic and institutional models when making sourcing

choices. They conclude that the study of local governments' sourcing may benefit from integrating theories focusing on internal expertise and markets and by integrating economic theories, which assume rationality, with institutional theory, emphasising more unreflective and socially determined behaviour (Rosenberg Hansen, Mols & Villadsen 2011).

A basic overview of core theories that may explain the actions and behaviours of parties to the outsourcing relationship in the public waste management environment are synthesised from the literature.

2.9.1 Transaction cost economics and the resource-based view

A number of studies on inter-local cooperation and outsourcing in general rely on TCE (transaction cost economics) to explain organisations' contracting decisions (Carr & Hawkins 2013; Hefetz, Warner & Vigoda-Gadot 2012).

Bertelli & Smith (2010) remark that TCE is founded on the work of Coase (1937), who concluded that transaction costs drive organisational structures (Bertelli & Smith 2010). TCE developed from the original Coase theorem (Coase 1937) into what is now known as classical TCE (Williamson 1976, 1979, 1981, 1987, 1993, 1999).

Brown, Potoski & Van Slyke (2010) refer to (Coase 1937; Williamson 1981, 1991, 1996) when explaining that markets can fail because of high transaction costs, limited information, uncertainty about the future and the prospect that people or organizations behave opportunistically in their interactions. They explain that in these instances, win-win voluntary exchanges are replaced by lose-lose outcomes (Brown, Potoski & Van Slyke 2006).

Brown, Potoski & Van Slyke (2010) explain that Williamson's (1999) asset specificity relates to asset-specific investments which are difficult or impossible to redeploy, which results in a hold-up problem for the purchaser, as the seller may engage in opportunistic behaviour to exploit unforeseen events and contract ambiguities (Brown, Potoski & Van Slyke 2010). Where local government outsources a highly specified service, such as development or management of a landfill site, it may not be in the seller's best interest to disclose waste data regarding the inappropriate disposal of what may be considered hazardous waste (Brown & Benn 2009; Ji & Deegan 2011; Lloyd-Smith 2009; Rae & Brown 2009).

RBV (resource-based view) focuses on how an organisation utilises its resources to develop and maintain a competitive advantage (McIvor 2008; Minkoff 2013; Sundell & Lapuente

2012; Warner & Hefetz 2012). In the context of the public sector, the relevance of RBV can be found in the decision to source expertise externally. Empirical evidence suggests that RBV in some cases offers clearer support for outsourcing decisions than TCE (Ali, Ali Asghar Anvary & Ali 2008; Lacity & Willcocks 2011; Rosenberg Hansen, Mols & Villadsen 2011).

In the context of outsourcing waste management services, the technical expertise required to recover resources from waste streams may not be available internally and has to be obtained elsewhere. In what may be considered thin markets, the risk of opportunistic behaviour among service providers increases, with a corresponding lack of willingness to account for critical waste data (Brown, Potoski & Van Slyke 2006; Girth et al. 2012; Godfrey, Scott & Trois 2013; Lamothe, S & Lamothe 2013; Loughlin & Barlaz 2006; Warner 2009).

2.9.2 Theory of incomplete contracts

The parties to a contract cannot fully predict all future possible scenarios and, as such, all contracts will always be underspecified or incomplete (Bertelli & Smith 2010; Brown, Potoski & Van Slyke 2006; Brown, Potoski & Van Slyke 2010; Dekker, Sakaguchi & Kawai 2013).

The theory of incomplete contracts (TIC) provides a useful analytical framework for studying situations in which contracting is a complex operation (Grossman & Hart 1986; Hart & Moore 1999). The theory predicts that privatisation or outsourcing may result in cost decreases but may also lead to deterioration in the quality of the service (Bel & Fageda 2007, 2008) due to opportunistic behaviour by the vendor. In responding to the risk of opportunistic behaviour, contracting governments must necessarily incur transaction costs by writing more detailed contracts and monitoring the behaviour of the vendor (Brown, Potoski & Van Slyke 2006).

More relational contracting over time may reduce the transaction costs associated with reduced bidding, monitoring and legal costs (Brown, Potoski & Van Slyke 2006; Hart & Moore 1999). The aim of contract management should be to motivate the vendor to go beyond what the letter of the contract says towards more consummate behaviour, and in the process creating a win-win situation (Brown, Potoski & Van Slyke 2010; Hart & Moore 2008).

For example, the outsourcing of development, ongoing management and rehabilitation of landfill sites are considered examples of complex contracting. In the absence of clear

frameworks or governmental directives, TIC may prove useful as a point of departure to explore outsourcing relationships and the accountability implications thereof.

2.9.3 Public choice and social choice theories

Public choice theory considers public service delivery choices and concludes that overproduction and inefficiencies are the result of politicians and bureaucrats monopolising public service delivery (Niskanen 1971, 1972). Building on this theory, privatisation and outsourcing models were developed to remedy the political rents and political power the politicians and bureaucrats extracted from public service delivery (Ostrom 1972; Savas & Schubert 1987). These initiatives developed into what later became known as NPM (new public management) (Osborne & Gaebler 1993) as a counter-movement to politicians and bureaucrats acting in their own rather than the public interest (Simões, Da Cruz & Marques 2012).

Social choice theory developed from the public interests' desire to express their wishes collectively. Hefetz & Warner (2007) found a marked shift of privatization in US municipalities back to public service delivery. They argue that public managers adopt a pragmatic approach of balancing the benefits of competition as advocated by NPM with market efficiencies contemplated by TCE whilst ensuring the citizens' voice is heard (Hefetz & Warner 2007; Sager 1999).

The impact of political influence and the ideological predisposition of managers on outsourcing decision making are the focus of much scholarly debate. Some studies suggest that political influence plays a more important role in local government managers' decision to outsource than personal ideologies (Ball, Broadbent & Moore 2002; Bel & Fageda 2007, 2009, 2010; Bisman 2008; Hefetz, Warner & Vigoda-Gadot 2012; Kloot & Martin 2002, 2007; Kluvers & Tippet 2010; Warner & Hefetz 2012).

2.9.4 Agency theory

Agency relationships between principals and vendors arise from contracts and other forms of social control. These agency arrangements may result in new agency costs and may create conflicts of interest. The principal-agency problem arises in that the seller may display opportunistic behaviour to the detriment of the buyer by sacrificing the goals of the principal

and not disclosing it to him or her (Bertelli & Smith 2010; Brown, Potoski & Van Slyke 2010; Calabro & Torchia 2011; Jensen & Meckling 1976).

The outsourcing frameworks discussed earlier in this chapter share a common understanding that managerial skill and management support are a prerequisite for managing the agency relationships resulting from outsourcing. Public managers must respond to additional challenges compared with the private sector. These outsourcing challenges arise from the fact that

Public management is supremely taxed by decentralization trends as it must respond to the challenges presented by a contracting state within a democracy. It is public managers who must keep policy making from devolving into a set of contracts with disconnected interests—the slippery slope of the state of agents (Bertelli & Smith 2010, p. 122).

Public managers may also be self-interested agents motivated by a longer-term of office and larger budgets. The citizen is the primary democratic principal in the local government setting, but due to the degree of separation, the risk of opportunistic behaviour by public managers or local government external service providers is very high. Heinrich, Lynn & Milward (2010) express concern that public management capacity is compromised by extensive contracting, and the extensive deferral of responsibilities means it may no longer be able to reclaim full authority as the statutory agent of constitutional authority (Calabro & Torchia 2011; Cruz & Marques 2012; Heinrich, Lynn & Milward 2010; Niskanen 1971).

Principal-agency theory is a useful framework in which to study the structure and management of complex product contracts. When the principal manager manages uncertainty by outsourcing complex products such as resource recovery or landfill development to an expert agent, their goals are unlikely to be perfectly aligned (Brown, Potoski & Van Slyke 2010).

In the event of multiple principles and agents in a complex network of actors such as the SWSA waste management network, conflicts of interest may arise that could potentially result in accountability problems (multiple agency theory). The agency and multiple agency theories offer an understanding as to how such relationships can be best managed to avoid exploitation by either party. Frameworks designed to manage complex public outsourcing

must give due consideration to governance and accountability measures to adequately respond to potential conflicts of interest (Calabro & Torchia 2011).

2.9.5 Institutional theory

Institutional theory focuses on the normative, regulative and cultural characteristics of the environment (Rosenberg Hansen, Mols & Villadsen 2011; Scott 2010). It examines the processes and mechanisms by which structures, schemas, rules and routines become established as authoritative guidelines for social behaviour (Scott 1987, 2005, 2010).

The regulative environment is clearly completely different in the public sector compared with the private sector, limiting institutions in how freely they can operate (Hukkinen 1995; North 1990). Institutional arguments have been used to explain sourcing decisions in public organisations and local government (Brown, Potoski & Van Slyke 2006), but according to Rosenberg Hansen, Mols & Villadsen (2011), the theory should be more extensively considered in exploring local governments' satisfaction with sourcing arrangements (Rosenberg Hansen, Mols & Villadsen 2011).

Simoes & Marques (2012), in their extensive literature review on economic considerations regarding waste management, lament that they could not find studies on economic regulation in the waste sector. They suggest that this may be a consequence of the very limited number of regulators dedicated to the waste sector (Simões & Marques 2012).

2.9.6 Institutional collective action

As a framework to study and understand policy and governance, ICA (institutional collective action) focuses explicitly on the externalities of choice in fragmented systems. The ICA framework considers how alternative mechanisms to mitigate these collective action problems evolve, are selected or are imposed (Feiock 2013). The relevance to accountability for outsourcing of waste management services can be found in that these services have different economies of scale and are demanded by citizens at different levels of quantity and quality (Feiock 2013) across inter-local jurisdictions. Where waste services of low quality and quantity are demanded by citizens the resulting waste data are likely to be of a similar low quality.

ICA dilemmas occur when officials responding to policy interventions which require high quality waste data seek to negotiate the maximum net benefit by either cooperating in a

regional structure or choosing not to cooperate (Dollery, Hallam & Wallis 2008; Dollery, Kortt & Grant 2012; Feiock 2013; Gruber & Bank 2009).

Feiock (2013) suggests that the ICA framework assists in diagnosing three sources of collaboration risk: (i) the specific nature of the underlying ICA dilemma; (ii) the distribution of preferences within and across the jurisdictions or organization affected by the dilemma; and (iii) the higher-level rules, local political institutions and existing ICA mitigation mechanism in place (Feiock 2013).

When outsourcing waste management services in the SWSA jurisdiction, a number of ICA dilemmas arise. Considerations regarding the level of participation in regional waste planning structures, collaborative partnerships to recover resources from waste streams and use of inter-council outsourcing to dispose of waste in landfills in neighbouring jurisdictions result in accountability problems.

Whilst the theories above are by no means the only theories that could potentially explain the behaviour of actors in the SWSA waste management network, they do serve the purpose of highlighting potential accountability problems when implementing outsourcing frameworks.

2.10 Constraints on LGAs implementing governmental policy directives

Measham et al. (2011) argue that LGAs are highly constrained in terms of resources and lack of information. They found that this impacts negatively on long-term planning anticipated by policy directives from higher levels of government, with local government managers often responding with short-term reactive responses to policy interventions (Measham et al. 2011).

A study on the accountability consequences for LGAs resulting from federal waste policy interventions accordingly benefits from an understanding of constraints to implementing such policy directives. In considering the Measham et al. (2012) suggestions, possible constraints to implementation of public policy directives are considered to be strategic planning; procurement; performance management and performance reporting; and environmental, waste and sustainability data collection and reporting.

2.10.1 Strategic planning

In exploring the accountability aspects of planning for future outsourcing of waste management services, it is noted that a number of Australian studies reflect on poor planning

practices in the Australian public sector (Aulich, Sansom & McKinlay 2013; Dollery & Akimov 2008b; Grant, Dollery & van der Westhuizen 2012; Gruber & Bank 2009; Kloot 2001; Kornberger & Clegg 2011; Measham et al. 2011; Potts 2009).

Kornberger & Clegg (2011) conducted a mixed method study on the strategic planning processes underlying the Sustainable Sydney 2030 project. They concluded rather critically that the silo mentality of the city administration made the implementation of new ideas difficult and that even though extensive consultation took place, no new meaningful insights were formed. They observed that the project was made up of big-picture thinking and grand gestures with questionable value, and the communication forms resulted in stale debates, with no mutual learning taking place (Kornberger & Clegg 2011).

The Council of Australian Governments (COAG) Reform Council reviewed the Tasmanian Government strategic planning system for Hobart. Although they noted that planning processes are under reform, they observed the following (COAG 2012, p. 187):

The Tasmanian Government appears to have a close relationship and good consultation with local government.

The Tasmanian Government could improve stakeholder consultation arrangements both at an early stage of the planning process as well as throughout the process.

Using infrastructure to achieve the strategic economic, environmental and social goals of government and to manage national policy issues was not strongly demonstrated by the Tasmanian Government.

Although it is noted as a key challenge, no specific policies, initiatives or actions to address demographic change were set out by the Tasmanian Government.

The COAG (2012) findings make reference to policy instruments and infrastructure development. The development of modern, licensed landfill sites necessitates large investments in developing new and improving existing infrastructure as well as the acquisition of scarce urban land. This results in increased per-unit garbage charges which must be recovered by LGAs from their customers. Rising costs of per-unit garbage collection costs also include the cost of new, technologically advanced resource recovery and recycling centres. The external or indirect cost of recycling and managing waste as a resource often includes waste disposal levies in accordance with the 'polluter pays' principle to fund

development and improve reporting on these initiatives (Environmental Protection Authority 2009; EPHC 2010b; Fukushima et al. 2010; Knussen et al. 2004; Lane 2011; May & Knight 1999; Parsons & Kriwoken 2010; Salhofer et al. 2008; SCEW 2012; Scott et al. 2005; Shaw et al. 2007; Wilson 1996; Young, Ni & Fan 2010).

2.10.2 Procurement

Rural and smaller municipalities often find it difficult to outsource services due to an insufficient number of qualified contractors and insufficient managerial capacity (Bel & Fageda 2011; Bel & Warner 2013; Hefetz & Warner 2012; Mohr, Deller & Halstead 2010; Wassenaar, Groot & Gradus 2013).

These sub-optimal or thin markets, resulting from a limited number of service providers or collusion between service providers may increase transactional outsourcing costs, which include external costs such as reduced accountability, to the extent that the costs exceed potential outsourcing benefits (Dijkgraaf & Gradus 2007a, 2007b, 2008a; Girth et al. 2012; Merickova & Nemec 2013).

Small and rural municipalities often respond to these challenges through strategic alliances with other LGAs or contracting with neighbouring councils, which may result in accountability problems¹³ (Bae 2009; Carr & Hawkins 2013; Dollery, Akimov & Byrnes 2009; Dollery, Grant & Akimov 2010; LeRoux, Brandenburger & Pandey 2010; LeRoux & Carr 2010).

Kloot & Martin (2007), in their study on Victorian LGAs, found that compulsory competitive tendering processes had a major impact on Victorian local authorities, more so than compulsory corporate and strategic planning processes. They concluded that no evidence of a culture of embracing modern procurement processes could be observed. Smaller LGAs do not have adequate resources to underpin sophisticated contract management governance systems (Kloot & Martin 2007).

2.10.3 Performance management and performance reporting

Strategic planning is enhanced through the adoption of publicised corporate or strategic plans, but implementation may suffer if these plans do not include appropriate performance targets (Kloot 2001).

¹³ Refer to the discussion on agency theory and the ICA framework.

The COAG Reform Council found (COAG 2012, pp. 4–9) that in general the Australian cities' planning processes do not contain clear measurable outcomes or clear descriptions of the actions required to pursue strategic goals. Both accountability for and performance monitoring of outcomes and implementation are limited. The report found only partial compliance with timelines and performance measures in their review of the Tasmanian government's planning processes for Hobart city (COAG 2012, p. 199):

An integrated method of performance assessment for plans and policies is not in place, noting that the capital city plan is still in development.

Kloot's (2001) study of 78 Victorian LGA authorities through textual analysis of their corporate plans established that only 40% of the plans made reference to waste management as a key performance area, surprising in so far as waste management is a core function of Australian LGAs. The primary finding of the study is that performance measures are largely descriptive and no clear targets or specific outcomes were noted. The study concluded that there is a clear need for the development of suitable performance indicators in Australian local governments.

Lee & Fisher's (2007) survey of 100 federal, state and territory public entities which provide services directly to the public concluded that although performance information related to output and quality of service is considered useful, it is not extensively used. They remark that earlier findings which concluded that the implementation of perceived useful performance measures is problematic remain valid. The challenges they identified, in line with earlier studies, are that of limited staff motivation and skills shortages as well as difficulty in obtaining quality data for benchmarking purposes (Lee & Fisher 2007). Dollery & Manley (2007) concluded that most LGAs, with the partial exception of Tasmania, only consider the supply side of municipal activities, with strategic direction mostly not reflecting political imperatives and feedback from service stakeholders. A number of other Australian studies found similar constraints in performance measurement and reporting in LGAs (Brackertz 2006; Carnegie & Baxter 2006; Kloot 2006; Moynihan 2006; Pickin 2008; Sharma 2005; Umashev & Willett 2008; Woodbury, Dollery & Rao 2003; Worthington & Dollery 2001).

Bel & Warner (2009) conducted a case study on the restructuring of the city of Barcelona, Spain's street cleaning and garbage collection services through accessing data from websites and in-depth interviews with public and private waste managers. A marked improvement in service quality was observed after the restructuring of these services was completed. They

concluded that by benchmarking competition and consolidating the two services, monitoring of the new contracting system became easier and the scale of economics in monitoring resulted in an improvement in the ratio of cost to service quality (Bel & Warner 2009).

Care should be taken in interpreting some of the older studies due to the amendments in legislation related to planning practices referred to earlier. The recent COAG (2012) report on city planning processes suggests that performance management and reporting in the public sector remain a challenge. A recent Austrian study on the use of performance information by public managers and politicians in new forms of public governance structures found that performance information is used for internal decision making rather than external accountability purposes. The study found it noteworthy that although some respondents had a pro-NPM stance, they do not consider the use of performance information for external accountability information in the same light (Saliterer & Korac 2013).

2.10.4 Reporting on the environment, waste management and sustainability

Zutshi, Sohal & Adams (2008), in their study on constraints to the implementation of EMS (environmental management systems) in Australian organisations, identified a lack of commitment by top management and shortages of financial and human resources to be major impediments to improving EMS in public entities. They strongly recommend that knowledge-sharing networks be created across all government departments to improve EMS (Zutshi, Sohal & Adams 2008).

A 2003–2006 research project explored the environmental accounting for waste and waste recycling services in the 152 NSW authorities by surveying 140 local authorities and by interviewing 12 managers directly involved in waste management (Qian & Burritt 2007; Qian, Burritt & Monroe 2011). Qian et al. (2011) concluded that environmental management accounting information is only moderately used in waste management services but that these applications were becoming more widespread. They observed that in three local authorities, recycling services are outsourced and in some instances the service providers do not have the capacity to adequately capture and report on the different types of recyclables. They concluded that in only a few of the case studies, the local authorities accounted for the full cost of waste, mostly disregarding externalities such as hidden future costs, costs associated with recycling and loss of land capacity. A number of Australian studies express concern and identify constraints to accountability and sustainability reporting in LGAs (Dollery & Kelly

2012; Miley & Read 2000; Stanley, Jennings & Mack 2008; Williams 2011; Williams, Wilmshurst & Clift 2011).

2.11 Summary

This literature shows that different LGAs outsource different waste management services for different reasons and also in different ways. The 2010 Australian National Waste Report remarks that government policy has a major bearing on investment in new and improved waste and recycling technology. The expectation of government for LGAs to collaborate in unproven outsourcing initiatives requires considerable commitment and investment (EPHC 2010b, p. 287).

There is an expectation by the waste management public policy directives that regional waste management networks can respond to improve waste data collection and collection systems by adopting best-practise principles. The collection of waste data across organisational boundaries is constrained by inappropriate contracts in a dynamic regulatory environment and funding constraints. Improvement in waste data collection and collection systems must be achieved through adoption of best-practise principles and by developing suitable tools (Ball, Broadbent & Jarvis 2006). Application of the Vagadia (2012) best-practise framework suggests that data collection and collection systems may be improved by aligning the strategic objectives of principal, agent and stakeholders. Communication, contract management and management and monitoring of relationships may serve as governance mechanisms to strengthen accountability between actors in networks (Vagadia 2012).

In determining whether the waste data accountability expectations of the Australian federal government are being met through outsourcing practices of LGAs, consideration must also be given to Quinn's (2000) fundamental question whether actors in the SWSA jurisdiction network are willing or may become willing to share waste data.

Chapter 3: Theoretical framework

3.1 Introduction

This chapter synthesises an appropriate theoretical approach to investigate the research question by considering suitable theoretical approaches and their limitations taken from the literature reviewed in Chapter 2.

The accountability expectations of the Australian federal government in respect of the provision of waste data are embodied in the National Waste Policy Implementation Plan. There is an expectation that waste data collection and supporting data collection systems will be improved to facilitate the three-yearly national ‘current and future trends waste and resource recovery report’ (EPHC 2010a, p. 19).

In Chapter 1, it is established that the accountability expectations of the Australian federal government for improved waste data collection and collection systems extend to LGAs’ outsourcing practices through the National Waste Policy Implementation Plan. This recommends that state governments outsource waste management services through the establishment of ‘multi-agency management arrangements’ and ‘active partnerships’ between governments and industry (EPHC 2010a, p. 9).

This prompts the research question stated earlier:

Are the accountability expectations of the Australian federal government satisfied in the outsourcing of waste management services by Local Government Authorities?

The collaborative nature of the outsourcing arrangements between local government agencies, with some agencies acting as waste service providers, results in complicated regional waste management networks (Lester & Reckhow 2013). Accountability problems between actors in these ‘multi-agency management arrangements’ and ‘active partnerships’ in respect of the supply of waste data (Carr & Hawkins 2013) arise for a number of reasons. A suitable theoretical approach must take account of the fact that different regional waste networks may have different unique circumstances giving rise to accountability problems that are specific to that jurisdiction.

3.2 Relevance of prior research to this study

In Chapter 2, it is evident that poor national waste data provided by local governments and their service providers may be a result of either fundamental problems in the accountability relationship between higher and lower levels of government (Ball, Broadbent & Moore 2002), inappropriate or inadequate responses by LGAs and their service providers to national policy interventions (Ball, Broadbent & Jarvis 2006) or an inability by lower-level agencies to respond adequately due to resource constraints (Qian, Burritt & Monroe 2011).

Due to the complex nature of the outsourcing practices of LGAs and the complicated regional waste management networks that flow from these practices, an exploratory and interpretative research approach is required to develop an understanding of the complexities associated with such cases (Berg 2004). This exploratory approach entails viewing each individual case through the lens of a combination of theoretical approaches (Smith & Cheng 2006) rather than developing new theories or testing existing theories designed to explain the phenomena (McIvor et al. 2009).

3.3 The ICA Framework

This study broadly follows the ICA framework (Feiock 2013) to explore the Australian federal government's accountability expectations due to the collective action required by multiple LGAs and their service providers in different jurisdictions to provide national waste data (Bel, Fageda & Mur 2014).

The ICA framework is underpinned by a number of research traditions and theoretical approaches that may explain the behaviour of parties to the outsourcing relationships which result in collective action networks (Feiock 2013). TCE, as one of these theoretical foundations, is often used in research approaches designed to explain the behaviour of public organisations. TCE is specifically relevant to the outsourcing of waste management services due to the high asset specificity and measurement problems related to waste management services, which increase supplier hold-up risk and transaction costs (Williamson 1981, 1987, 1993, 1999).

LGAs and their service providers' responses to policy interventions are not just informed by market pricing principles (Farneti & Guthrie 2009; Ghoshal & Moran 1996). The principles underlining TCE are only used in this study to assist in developing an understanding of how the outsourcing of difficult-to-measure waste management services which require highly specified assets lead to collaborative outsourcing practices, which can impact negatively on

the federal government's accountability expectations, rather than providing the main theoretical framework for the thesis.

The ICA framework also incorporates agency theory, which is often used in studies of accounting and accountability (Brennan & Solomon 2008). Agency theory is specifically relevant to this study because potential accountability problems may arise in those instances where service providers to LGAs act in their own commercial best interests and do not disclose sufficient information to establish adequate accountability relationships. Senior and middle managers of LGAs may similarly be conflicted in providing waste data that may impact on their job security, status or social standing (Brown, Potoski & Van Slyke 2010; Jensen & Meckling 1976; LeRoux & Pandey 2011). Agency theory is used in this study to develop an understanding of how incongruent goals of principals and agents may impact on government's accountability expectations, rather than serving as the main theoretical approach.

The ICA framework is considered the most suitable approach for this research as it provides a comprehensive means of (i) determining the scale and nature of the potential accountability problem of poor waste data flow between federal, state and local government; (ii) determining the response preferences to the accountability expectations of the federal government for improved waste data collection systems by LGAs and their service providers which impacts across jurisdictions and organisations; and (iii) determining what best-practice outsourcing mechanisms are available to LGAs to respond to the accountability expectations of the federal government when engaging in waste management outsourcing practices (Feiock 2013).

3.3.1 Scale and nature of the accountability relationship

Lindberg (2013) argues that an accountability relationship can only exist if there are clear and measurable criteria or standards of what is considered acceptable or accountable behaviour and the principal has a factual and enforceable right to information or a demand for explanation of actions and behaviours.

This study follows Lindberg's (2013) approach by exploring whether the federal government's accountability expectation of more and improved waste data is factual and enforceable by offering a critique of the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy in Chapter 5. It also considers Ball, Broadbent & Moore's (2002)

arguments that a central-local government accountable relationship must be based on a clear understanding of what constitutes acceptable or accountable standards of management through application of appropriate performance measures.

There is a further accountability expectation from the Australian federal government that the improvements in waste management systems which include data collection must take place through collaboration across jurisdictions, between governments at all levels and across organisational boundaries, such as between LGAs and their service providers (EPHC 2010a, p. 9). The critique of the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy in Chapter 5 also considers whether appropriate performance measures are adequately communicated to LGAs and their service providers on how to improve on waste data collection and collection systems. Whether performance measures are adopted by LGAs is also explored by performing a textual analysis of LGA corporate plans to determine whether they may assist in delivering on the federal government's accountability expectations.

The findings in Chapter 5 are supplemented with interviews in respect of those areas of accountability concerns that warrant further investigation in Chapter 7.

3.3.2 Response preferences by LGAs to the National Waste Policy Implementation Plan

Ball, Broadbent & Moore (2002) note that local government managers have a spectrum of possible responses to centrally imposed policy interventions, that is, a narrow reactive approach to demonstrate improvement at the one end or adopting a longer-term systems approach by following a business excellence model at the other end.

Policy interventions, such as directives to engage in collaborative outsourcing initiatives, can illicit different response preferences from different LGAs. For example, smaller LGAs may prefer to assign the collection of waste data to service providers through relational contracting, while metropolitan LGAs may prefer to collect the data by engaging in arm's-length contracting (Bertelli & Smith 2010; Desrieux, Chong & Saussier 2013). The theory of incomplete contracts discussed in Chapter 2 is used to develop an understanding of the natural response preferences to contracting in Chapter 6.

To explore the different response preferences to the accountability expectations which impact across organisational boundaries, this study follows Burritt's (2012) suggested research approach which posits that an improved understanding of the impact of pre-determined public

policy can be developed by exploring how information is managed across accountability boundaries (Burritt 2012).

The reasons why LGAs outsource waste management services in the normal course of business is explored in Chapter 6 through a textual analysis of LGA corporate plans to develop an understanding of the possible effects existing outsourcing relationships might have for the accountability expectations of the federal government.

The findings in Chapter 6 are supplemented with interviews in respect of those areas of accountability concerns that warrant further investigation in Chapter 7.

3.3.3 Mechanisms available to LGAs to respond to the National Waste Policy Implementation Plan

The National Waste Policy Implementation Plan directs the establishment of best-practise waste management networks for remote communities (EPHC 2010a, p. 19). The study accordingly explores best-practise mechanisms available to LGAs to guide the governance of outsourcing initiatives by considering the governance dimensions inherent in the best-practise outsourcing frameworks available in the management literature.

The governance dimensions from the Vagadia (2012) framework discussed in Chapter 2 are identified as best-practise mechanisms by which principals can hold agents accountable in contractual environments, the mechanisms being (i) alignment of goals and objectives within organisations, between parties to the outsourcing arrangements and with stakeholder values; (ii) communication; (iii) contract management; and (iv) managing and monitoring of relationships (Vagadia 2012).

The application by LGAs of these governance dimensions in their waste management outsourcing practices and possible constraints to application are considered by performing a textual analysis of corporate plans in Chapter 6, supplemented by interviews regarding areas of accountability concerns in Chapter 7.

3.4 Extension to prior research

The ICA framework has not previously been applied in studies of waste management in the local government sector. The ICA framework has been successfully applied in studies in

similar policy areas of water (Berardo & Scholz 2010), public safety (Andrew 2009) and regional planning (Gerber, Henry & Lubell 2013).

To address the accountability and environmental policy issues related to waste management not previously considered in ICA framework studies, theoretical approaches from the management (Brennan & Solomon 2008), accountability (Smith & Cheng 2006) and sustainability (Gray 1992, 2002, 2005) literature are utilised.

3.5 Summary

This study follows the ICA framework (Feiock 2013). The ICA framework is broad in that it combines prior research findings from policy studies of complex networks with studies of local government economics. The ICA theoretical framework is the most suitable theoretical approach to study the combination of phenomena inherent in the research question because it allows for the combined results of policy and local government economics studies to be complemented by the theoretical constructs from managerial best-practice outsourcing literature such as Agency theory (Jensen & Meckling 1976) and Transaction Cost Economics (Williamson 1981, 1987, 1993, 1999).

Chapter 4: Methods and access to data

4.1 Introduction

This chapter denotes the research subjects and discusses the methods utilised in this study. The subjects for this study are the LGAs and their service providers in the SWSA jurisdiction situated in the Hobart region, Southern Tasmania. The project takes a case study approach. The methods for data collection utilised in this study are textual analysis of the corporate plans of the research subjects and interviews with managers of the LGAs, their stakeholders and service providers.

4.2 Case study

Reporting on Australian national waste data is the result of a consolidation of waste data of various states and territories (Blue Environment 2013, pp. 80–92). Outsourcing of waste management services in turn influences the consolidation of data flows across different organisational boundaries and different jurisdictions within the various states and territories (Ball 2005; Ball, Broadbent & Jarvis 2006; Burritt 2012).

A study of the accountability expectations of the Australian federal government against the outsourcing practices in a specific region produces context-dependent knowledge derived from the interpretation of stories of individual actors, social identities, group identities and collective actions in that region (Berg 2004, p. 207; Hyder Consulting 2011, pp. 1 & 5; Riessman 2008).

A case study is the preferred research strategy when the boundaries between the phenomenon and the context are not clearly evident (Yin 2014). The influences of, for example, the impact of landfill facilities situated in other jurisdictions and resulting constraints in collecting waste data by LGAs and their service providers are not fully understood (Ball, Broadbent & Jarvis 2006; Hyder Consulting 2011, p. 5).

This study is an empirical enquiry focusing on understanding and describing processes and organizations within their real-life context (Yin 2014). The use of evidence derived from cases has proven to be a dependable way for social scientists to substantiate their arguments (Ragin 1992) because of the variety of evidence that can be obtained from a case study, such as documents, artefacts, interviews and observations (Yin 2014).

This case-centred approach endeavours to keep the wealth of information intact through narrative analysis, and findings are presented in a narrative format to keep the story intact (Riessman 2008).

The research project undertakes a study of the SWSA, a duly constituted LGA in Southern Tasmania, Australia. It includes the 12 current and past member councils of the SWSA comprising Brighton, Central Highlands, Clarence, Derwent Valley, Glamorgan Spring Bay, Glenorchy, Hobart, Huon Valley, Kingborough, Sorell, Southern Midlands and the Tasman Council, with their important waste management service providers.

4.3 Methods for data collection

The study adopts a multi-method approach to collecting and analysing data. The benefit of such a multi-method approach is that an important factor that may be overlooked by a single-method approach is prevented (Denzin 1970; Jick 1979; Smith 1975; Webb et al. 1966).

This approach combines textual narrative analysis of documents, archival records and direct observation supplemented by semi-structured interviews (Yin 2014). The data extracted from the information sources are presented in tables of data designed to build an in-depth picture of persons, processes and settings to convey the full range of contexts of the study (Charmaz 2006, p. 18; Creswell 1998).

A textual analysis of strategic and corporate plans forms the basis of the document analysis (Cornut, Giroux & Langley 2012; Kloot 2001; Kornberger & Clegg 2011). Textual analysis of strategic and corporate documents allows one to examine the processes in and through which organizational and managerial phenomena are reproduced and transformed and how specific organizations and management practices are constructed (Vaara 2010).

Other publicly available documents, such as governmental and consultants' reports, are utilised to develop an understanding of the phenomena and to place the findings derived from the textual analysis of the corporate plans in the context of the federal government's accountability expectations. The data extracted from the corporate documents also form the basis of the questions asked during interviews (Patton 2002).

The matrix of information sources (Creswell 1998), which include corporate plans, consultants' reports, statutes and other public policy documents of the governments, SWSA and all the LGAs, are readily available due to these being in the public domain.

A narrative textual analysis of accountability provisions in the National Waste Policy Implementation Plan and Tasmanian Waste Strategy is conducted. The accountability provisions are considered against the findings of the literature review to construct the initial codebook of key concepts (Neuman 2000) to guide data collection and analysis (Yin 2014).

Textual analysis was performed by using NVivo textual analysis tools to establish the presence of the categories of themes and concepts identified during the construction of the initial codebook in the corporate plans under investigation (Carley 1993). Sub-themes and concepts arising from the inquiry were added as sub-categories to the codebook to guide analysis of specific phrases and passages (Riessman 2008).

The document analysis is supplemented by semi-structured interviews. The interviews consist of open-ended questions. Open-ended questions offer the flexibility to explore certain areas in greater depth and also to pose questions about new areas of enquiry that were not originally anticipated in the interview instruments' development (Patton 2002).

The interviews were conducted with senior and middle managers of the Tasmanian state government, LGAs and their service providers and community representatives. Multiple sources of information were sought to provide a comprehensive perspective on the differing views and attitudes of actors in the SWSA jurisdiction (Patton 2002).

Open-ended questions are aimed at evaluating interviewees' perceptions of the Australian federal government's accountability expectations with regard to the collection of waste data for national reporting purposes and the improvement of related data collection systems and how actors in the SWSA jurisdiction respond to these expectations. The interview questions underpinned by the study's theoretical framework (Feiock 2013) are also aimed at evaluating how LGAs apply best-practise outsourcing governance concepts and what the constraints to applying these principles may be.

Interviews were undertaken with the permission of the University Ethics Committee under reference H0014947.

4.4 Interview response rate

The invitation e-mail (Annexure I) requesting an interview was sent to 22 potential respondents in the period May to August 2015, followed up by a telephone call confirming receipt of the e-mail. The population of potential respondents in the SWSA jurisdiction is as follows; 12 general managers of LGAs, 3 general managers of joint-LGAs, 12 senior LGA managers overseeing the waste function, 15 councillors serving as chairpersons of LGA waste management committees, 4 general managers of private waste service providers, 2 chairpersons of community organisations and 2 state government waste managers. A total of 50 potential respondents were identified.

A senior LGA manager, active in the waste management industry was firstly interviewed. The manager supplied the names of 24 key actors in the waste industry in the SWSA jurisdiction that would be able to provide evidence directly related to the case study topic (Verner & Abdullah 2012). Two of the identified potential respondents were not in office during the interview time frame. Letters were sent to the remaining 22 potential interviewees. The contact details were publically available.

Twelve affirmative responses were received. The sample size is therefore 12 interviewees out of a possible 48 respondents being 25%. Four affirmative responses were received from LGA senior managers and one from an LGA general manager. One response was received from a senior manager of a waste management service provider and two from general managers of waste management service providers. Two responses were received from representatives of environmental community interest groups and one from an LGA councillor actively involved in waste management affairs. A positive response rate of 55% of invitations send was accordingly achieved.

Due to the relatively close-knit network, at the request of some interviewees more specific details on the sampling process, relevant Australian LGA classifications, types of waste services, number of years' service and job titles are withheld. To protect anonymity, only broad descriptions of seniority and organisational types are included in the relevant interviewees' bibliography. Although the sampling process remains subjective, the sample of interviews is considered representative of the population. The following table depicts, in broad terms, the spread of interviewees across the population.

4.5 Pilot testing

Prior to conducting the interviews, the proposed interview questions were posed to a senior LGA manager from a large LGA in South Africa to ascertain its understandability and practicality. This review did not result in major changes to the interview questions or their format.

4.6 Conduct of interviews

All interviews were conducted face-to-face at the participants' choice of premises during the months of May to August 2015. Interviews varied in length between 40 and 70 minutes. Details of the interview dates are included in the relevant interviewees' bibliography.

Interviews were recorded and subsequently transcribed by an independent source. All transcripts were checked against the original recording and forwarded to the interviewees to ensure that they agreed that the transcripts were an accurate record of the interview. A small number of minor changes were noted and made on the transcripts.

4.7 Analysis of interview data

The same coding system was used in both the textual analysis of the corporate documents and transcribed interviews by using NVivo software tools. The interviews were analysed during June, July and August 2015. In addition to existing key concepts, categories and sub-categories (Carley 1993) derived from the document analysis phase in Chapters 5 and 6, the 12 interview questions are captured as NVivo nodes (Bazeley 2007) and responses coded in a manner designed to keep the narrative text intact (Riessman 2008) to obtain a more detailed, qualitative understanding (Verner & Abdullah 2012) of how those being interviewed view their world and to capture the complexities of their individual judgements, perceptions and experiences (Patton 2002). Manifest textual coding was undertaken in a manner which aims to keep the message, its purpose, participants and setting intact (Spee & Jarzabkowski 2011). Recording units consisted of phrases, sentences and paragraphs (Weber 1985) related to the key concepts. The units coded were identified by using NVivo text search and coding tools (Bazeley 2007; Edhlund 2011; Gibbs 2002; Richards 1999).

Units of data are sampled in accordance with the Charmaz (2006) prescripts where she contends that data must be rich, substantial and relevant in order to be suitable and sufficient

to depict empirical events. Charmaz (2006 p. 19) provides guidance on what constitutes rich and sufficient data by providing a list of key characteristics—the data should

1. provide enough background data about persons, processes and settings to understand and portray the full range of contexts of the study;
2. provide detailed descriptions of a range of participants' views and actions;
3. reveal what lies beneath the surface;
4. reveal any changes occurring over time;
5. provide multiple views of the participants' range of actions;
6. enable the development of analytical categories; and
7. facilitate comparisons between different data.

4.8 Validity and trustworthiness of methods for data collection

There are no formal rules for presenting interpretations and conclusions that result from an analysis of textual narrative data (Riessman 2008). The data and interpretations derived from the textual analysis of the corporate reports and analysis of transcriptions of interviews are presented in Chapters 5, 6 and 7. The primary data are presented in enough detail to allow other investigators to consider alternative interpretations (Riessman 2008). The presentation of data, combined with a detailed discussion on how interpretations were made, is transparent enough to compel others to act on it (Mishler 1990).

A summary of the number of narrative references coded from the transcribed interviews to each NVivo case node is presented in Annexure II. The ranking of the top three references for each category of participant is shown on the table. The ranking of the narrative references offer assistance to other investigators to interpret the level of importance interviewees attach to the various interview themes.

The transparent disclosures ensure the pragmatic validity and trustworthiness of the study.

4.9 Summary

The project takes a case study approach. The methods for data collection utilised in the study are textual analysis of the corporate plans of the research subjects and transcribed interviews with managers of the Tasmanian government, LGAs, community representatives and service providers.

Chapter 5: The Australian federal government's accountability expectations of the SWSA waste management network and the response preferences of the member councils

5.1 Introduction

The scope of what the National Waste Policy Implementation Plan, Tasmanian Waste Strategy, the Environmental Management and Pollution Control Act, 1994 and the Local Government Act, 1993 expect of local government with regard to the supply of waste data is explored in this chapter. The nature of the accountability relationships between actors in the SWSA jurisdiction is investigated, followed by a critique of the federal government's accountability expectations. A number of interview questions are developed.

5.2 The member councils of SWSA

The SWSA was established in 2001 to facilitate the coordination of the regional strategic planning of waste management services of its 12 member councils at the time¹⁴ (Blue Environment 2011). SWSA provides a suite of waste management planning and facilitation services against a levy payable by its member councils. The rules of the SWSA states

...the purpose of SWSA is to 'facilitate integrated regional strategic planning and implementation of the Southern Waste Management Strategy'. Its function is 'to provide the most cost effective management and facilitation of municipal waste minimisation programs, waste stream control and performance monitoring, establishment of a non- municipal waste minimisation program, monitoring of residual waste treatment technologies, infrastructure developments, implementation of the landfill development strategy, education and marketing programs... (Blue Environment 2011, p. 2).

The SWSA is one of three regional waste bodies in Tasmania: Cradle Coast Authority, consisting of six member councils in north-western and western Tasmania; Northern Tasmanian Waste Management Group, representing eight member councils; and SWSA

¹⁴ Details of membership are provided in Appendix 1.

(Southern Waste Strategy Authority), representing its 11 member councils¹⁵ in and around Hobart.

Twenty-six out of 29 LGAs in Tasmania are represented on these regional waste bodies, which cover 96% of the population. SWSA represents a population of 254,639 people and covers an area of 25,925 square kilometres (Hyder Consulting 2011, p. 72).

The SWSA has been highly critical of the inadequate recycling services offered by its member councils,¹⁶ by remarking that recovery rates across the region are generally low, with industry practice and trends implemented elsewhere showing that there are opportunities for improvement. The SWSA observes that recycling collection services are not uniform across the region and remarks that one municipality provides no service, other municipalities do not collect the full range of materials of possible recyclables with some municipalities using recycling crates, which is not the optimum method for maximising diversion of waste from landfill disposal (Blue Environment 2011, p. ES (iii)).

Based on the Australian LGA classification system, the 12 member councils can be described as ranging from very-large-agricultural on the one hand to urban-medium on the other (Local Government Board 2012, pp. 83–85). A review of these attributes and related data in Appendix 1 indicates that large disparities of population density per kilometre exist between the LGAs. For example, Hobart City Council has 154,09 people per kilometre of road that must be provided with kerbside waste collection and recycling services, while Huon Valley Council must provide 7,65 people per kilometre of road with similar services.

These large disparities make it more costly on a per-capita basis for outlying councils with large road networks and relatively small populations to supply comprehensive kerbside waste collection and recycling services at the same standard as their counterparts (Hyder Consulting 2011, p. 76). From a cost perspective, this leads to an increase in the outsourcing of these services (BDA Group 2009; Lavee 2007; Okuda & Thomson 2007; Wagner 2011). This in part explains why waste management services are provided by some member councils of the SWSA to their constituencies through direct service delivery, while other councils prefer the outsourcing of this service (Blue Environment 2011, pp. 13–33).

¹⁵ Hobart City Council resigned its membership in the SWSA effective from 30 June 2014 (Alderman Damon Thomas 2014).

¹⁶ Refer to Appendix 1 for a description of the range of recycling services offered by the LGAs.

The literature review in Chapter 2.4 revealed that the outsourcing of waste management services impacts on the ability of LGAs to collect waste data and to improve on data collection systems primarily because some critical waste data may be privately held, with some service providers not willing to disclose aspects of what they consider to be confidential trade information (Barton 2006). This is exacerbated when only a few waste management service providers are active in the marketplace because these service providers are in a position to dictate what information they are willing to disclose due to a lack of alternative bidders (Dijkgraaf & Gradus 2007a, 2007b; Merickova & Nemec 2013). The demand for waste data from the service providers may also be inadequate due to the increased costs and competency constraints associated with the monitoring and managing of the performance of waste management service providers by LGAs (Bisman 2008).

The waste management service providers and the possible accountability consequences of their actions in the SWSA jurisdiction are considered next.

5.3 The service providers in SWSA

Some LGAs in the SWSA jurisdiction provide their customers with direct waste management services, for example, the fortnightly kerbside waste collection service provided by Hobart City Council (Blue Environment 2011, p. 17). In contrast, Sorrell Council outsources its kerbside waste collection to Veolia, whilst Kingborough outsources its kerbside waste collection to Aussie Waste (Blue Environment 2011, p. 19).

The SWSA reflects on the limitations of existing waste management outsourcing arrangements and advocates for regional centralisation of waste management services by remarking that many of the waste contracts servicing their member councils are not adequately written to ensure appropriate service standards and data provision. They argue that greater cooperation in contracts facilitates better sharing of infrastructure (e.g. sharing resource recovery centres) could result in cost savings and in greater diversion of waste from landfill. They advocate for higher levels of coordination between member councils by allowing SWSA to represent them as a contract principal (Blue Environment 2011, p. 80).

Large multi-national waste management companies, such as Veolia Environmental Services (Australia), may benefit from such regional consolidation. Veolia has a number of collection and transport contracts with councils across Tasmania, and operates material recovery

facilities in Derwent Park and Invermay and a paper/cardboard recycling facility in Spreyton¹⁷ (Blue Environment 2011, pp. 12, 26 & 31).

Merickova & Nemec (2013) argue that large multi-national companies become less willing to disclose waste data when they develop an overly dominant position in the waste and waste recycling market to protect their market. In contrast, the Australian National Waste Report 2010 argues that whilst this type of concentration may limit competition, large companies have stronger internal resource capabilities which result in improved waste data collection for the purposes of public reporting (EPHC 2010b, p. 229).

Smaller private companies that service LGAs in the SWSA jurisdiction include Aussie Waste, Enee, Jones Waste Management, Spectran, Thorpe Waste, Recovery Tasmania, SBBM Enterprises and Soil First. In contrast with the large multi-national companies, smaller companies may not be able to adequately collect and supply waste data due to a lack of internal resources (Qian, Burritt & Monroe 2011).

The SWSA is highly critical of the collection and reporting of waste data attended to by private contractors in the SWSA jurisdiction, remarking that it

...is understood that some waste generated in Central Highlands is disposed of in Launceston but no further information is available.....Additional C&I waste/self-haul believed to be deposited at Hamilton landfill but figures not known . . . and

SWSA members reported rates of municipal waste generation.....large regional differences in the quantities of waste presented at the kerbside even for councils providing similar services. It seems likely that some of the data are incorrect..... there is some overlap and anomalies in these figures as Copping landfill receives MSW from.....councils.... It is likely some of the MSW from these councils is transported by commercial contractors to Copping landfill and is recorded as C&I waste..... (Blue Environment 2011, pp. 27,28 & 31)

In order to improve profitability, private contractors may dispose of waste intended for recycling more cheaply in landfill sites, thereby maximising profits (Lavee 2007). The cost of shipping is a major consideration in the commercial viability of Tasmanian recycling. For

¹⁷ Veolia processed approximately 55,000–60,000 tons of recyclable products in Tasmania during 2013, of which 41,558 tons or 1,731 containers were shipped northbound. Interstate or domestic shipments accounted for 45%, whilst the remaining 55% was shipped to Malaysia, Hong Kong, China, Philippines, Singapore, Korea and India (Veolia Environmental Services 2014, p. 5).

example, the loss of a direct shipping service and amendments to the Tasmanian Freight Equalisation Scheme have a major bearing on Veolia's decisions regarding which products to recover from waste streams (Blue Environment 2014, p. 26; Brooks 2013; Miller 2015; Smiley 2014). Similarly, hazardous waste may be inappropriately disposed of in council-managed landfill sites to avoid higher disposal charges and thus maximise profits (Lloyd-Smith 2009). Waste disposal levies payable may also be avoided if waste is misclassified as clean-fill, when in fact it may have been generated as MSW¹⁸ (MRA Consulting Group 2015, p. 12 & 23; Wagner 2011).

Some service providers in the SWSA jurisdiction may be unwilling to disclose comprehensive waste data for some of the reasons stated above:

Some stakeholders (especially commercial recyclers) express reservations about providing data without assurances about the data repository, provisions of access and use to which it would be put. This can especially be the case where data vests with the EPA, as there may be concern information provided could be used against them by the environmental regulators. (Blue Environment 2014, p. 33)

Outsourcing of public services by LGAs is not limited to common arm's-length contracting with the private sector. Public entities may also contract with other public entities, and public entities may contract with not-for-profit entities (Dollery, Akimov & Byrnes 2009). For example, SWS (Southern Waste Solutions) is a collaborative partnership between four LGAs incorporated as a joint LGA (Blue Environment 2011, pp. 19–26) which provides waste disposal and waste-handling services to its members, other government agencies such as LGAs and private customers (Southern Waste Solutions 1998, 2012a).

When contracting in a public network, uncertainty may arise as to who is accountable for collection and reporting of public waste data; for example, SWS receives waste for disposal to landfill directly from LGAs and indirectly through private kerbside collection service providers. The LGAs require waste data from SWS to comprehensively report on their performance to their stakeholders through their annual reports (Local Government Act 1993, sec 36A). LGAs disposing either directly or indirectly of MSW at the Copping regional authority landfill facility will not be able to report on waste diverted from landfill as

¹⁸ A voluntary waste disposal levy of \$2/ton is currently payable by the member councils of the SWSA. Waste disposed of at the Copping regional authority does not attract the current voluntary levy (Blue Environment 2011, pp. 71–77).

contemplated by waste public policy prescripts without input from SWS (Blue Environment 2011, p. 58).

The SWS also has a statutory reporting duty to other stakeholders, which places additional strain on internal resources. For example, an annual report is made to the Environmental Protection Authority (EPA) to show compliance with environmental legislation:

Provision to the Authority of annual reports showing monitoring results at the landfill and transfer station sites within acceptable parameters.....Provision to the Authority and to the EPA of annual reports showing full compliance. (Southern Waste Solutions 2012b, pp. 1–5)

Most of the member councils of SWSA are also members of the LGAT (Local Government Association of Tasmania) and the STCA (Southern Tasmanian Councils Authority) (Blue Environment 2011, pp. 9 & 12). In response to the public waste policies, the LGAT and STCA have made policy representations to the Tasmanian government that directly influence the collection of waste data. These aspects are explored in Chapter 6.

The management of emerging pluralistic models of public services production/provision through networked forms of governance to improve public service delivery requires public managers to have a clear understanding of how service delivery arrangements should be configured and how the outcomes should be monitored (Calabro & Torchia 2011; Cuadrado-Ballesteros, García-Sánchez & Prado-Lorenzo 2013; Keast, Mandell & Brown 2006).

Whether managers of LGAs, waste management service providers and regional networks have a clear understanding of their role in the complex ‘value chain information management’ system (Burritt 2012, p. 392) related to the collection and national public reporting of regional waste data is not fully known. The following questions are therefore included in the interview protocol:

Interview Question 1: In compiling the 3-yearly national waste report what is your organisation’s role in the collection of waste data?

Interview Question 2: In compiling the 3-yearly national waste report what is your organisation’s role in the improvement of regional waste data collection systems?

5.4 The role of LGAs in accounting for national waste data

Environmental performance accountability requires an understanding of who is demanding information, exactly what data must be reported and who is responsible for delivering the account (Miller 2005). Lindberg (2013) argues that for accountability relationships to exist the principal must either be able to sanction the agent or the agent must perceive some measure of threat. The sanction, perceived or real, ensures that the agent accepts responsibility for the domain of delivery, that is, provision of waste data. The following public policy prescripts and statutory provisions have bearing.

5.4.1 National Waste Policy Implementation Plan

The National Waste Policy Implementation Plan was jointly developed by all Australian governments and adopted by the Environment Protection and Heritage Council (EPHC) in July 2010. The National Waste Policy Implementation Plan identified 16 priority strategies across six key directions to be implemented over a 10-year period leading up to 2010.

LGAs attend directly or through outsourcing to the collection and treatment of the great majority of municipal solid waste (MSW) (Blue Environment 2013, p. 79). The reporting of national waste data and improvement of data collection systems are to a large extent dependent on LGAs and their service providers contributing relevant waste data and assisting in the improvement of waste data collection systems.

The National Waste Policy Implementation Plan does not assign responsibility to LGAs to provide waste management data directly to the Commonwealth Government (EPHC 2010a, p. 19). While constitutionally unable to enforce particular methods of waste data collection on the states and LGAs,¹⁹ the Accounting and Accountability Act (2013) imposes general requirements on state governments and their departments with regard to the provision of data to the Australian federal government (Public Governance, Performance and Accountability Act 2013).

Key direction 6 of the National Waste Policy Implementation Plan (EPHC 2010a, p. 19) with the corresponding strategy 16 considers the provision of national waste data to be the primary responsibility of the federal government, with support from the state and territory governments with no reference made to the role of LGAs, as follows:

¹⁹ Refer to the definition of LGAs in Chapter 2.

Providing the evidence: Decision makers have access to meaningful, accurate and current national waste and resource recovery data and information.

Strategy 16: To develop and publish a three-yearly current and future trends waste and resource recovery report. This will be underpinned by a system that provides access to integrated national core data on waste and resource recovery that is accurate, meaningful and up-to-date and available online.

In terms of the National Waste Policy Implementation Plan, the Australian and state governments are responsible for improving existing data collection and reporting arrangements against a pre-determined timeline, with no reference to the role of LGAs in the information chain:

Needs and purpose of data agreed by jurisdictions by 2011,

Diagnostic of existing data collection and reporting arrangements against agreed national data needs completed and gaps identified by 2012,

Short term improvements to data and collection arrangements identified and implementation commenced by 2013. (EPHC 2010a, p. 19)

The National Waste Policy Implementation Plan directs state and territory governments to advocate for the outsourcing of waste management services by advising on the establishment of ‘multi-agency management arrangements’ and ‘active partnerships’ between governments and industry (EPHC 2010a, p. 9). The roles and responsibilities of LGAs or groupings in which LGAs are represented vary depending on the jurisdiction in which they are situated (Hyder Consulting 2011, p. 1).

Brown, Potoski & Van Slyke (2006) explain that legal mandates that emanate from the legal architecture that frames a specific public service delivery will determine the boundaries within which public managers can operate. Public managers must therefore have a clear understanding of the laws and regulations that govern their organisational and service delivery environment. The obligations of the Tasmanian LGAs in this study are accordingly considered against the backdrop of the Tasmanian Waste Strategy and other relevant state legislation.

5.4.2 Tasmanian waste and resources management strategy

The Tasmanian Waste Strategy directs Tasmanian LGAs and the state government together with multiple agencies, such as industry associations, industry, community organisations and the public, to ‘Participate in and support national data collection systems and utilise results for waste and resource management planning’ (Environmental Protection Authority 2009, p. 15).

The Tasmanian Waste Strategy directs the development of action plans to deliver on its strategic objectives, which include support for the national data collection systems, as follows:

It is expected that, at a minimum, State Government and Local Government, either as individual authorities or through their regions, will develop and deliver Action Plans as appropriate for their area of responsibility in order to effectively achieve the objectives of Strategy. (Environmental Protection Authority 2009, p. 6)

The directive to ‘develop and deliver’ action plans is enforceable through the Tasmanian Local Government Act, 1993.²⁰ The Act does not prescribe the nature or format of these corporate plans or reporting thereon, which may lead to LGAs choosing not to include aspects of public reporting of waste management data. This begs the question as to what punitive measures the state government can implement to demand waste data (Ball, Broadbent & Jarvis 2006; Ball, Broadbent & Moore 2002).

The minimum duty of accountability is that of compliance with the law and reporting on the extent of compliance (Bebbington & Gray 1993). Even if the statutory provisions do not expressly indicate how public managers must comply with policy prescripts, the responses of LGAs to public policy interventions are often influenced by fear of sanction from higher levels of government (Ball, Broadbent & Moore 2002), thus establishing the accountability relationship (Lindberg 2013).²¹

A Sorrell Council remark: ‘Government pressuring the sector to facilitate mergers that are politically motivated at the expense of community collaboration’ (Appendix 5, para. 6) indicates that political pressures may be in existence that may lead to a move away from in-house service delivery to outsourcing of waste management services, or may lead to a redesign of existing outsourcing practices that may impact on public service delivery decision

²⁰ The act stipulates that single and joint LGAs are required to develop 10-year strategic (sec. 66), long-term financial management (sec. 70) and annual plans (sec. 71) (Local Government Act 1993).

²¹ Sec. 16 of the Local Government Act, 1993 allows the governor at request of the minister, on advice of the local government board, to adjust the boundary of a municipal area (Local Government Act 1993, sec. 16).

making (Bel & Fageda 2007, 2008; Levin & Tadelis 2010; Rodrigues, Tavares & Araújo 2012; Warner 2011).

5.4.3 Environmental Management and Pollution Control Act, 1994

Single and joint LGAs (and any other person) involved in waste activities²² are held accountable for the provision of waste data through the Environmental Management and Pollution Control Act, 1994 and the related Waste Management Regulations, 2010.

In practise, the demand for waste data from municipal landfill operators is made through the issue of an environmental practise notice,²³ with a spreadsheet made available by the EPA to facilitate data collection (Hyder Consulting 2011, p. 73). It may be argued that a stronger, legal accountability relationship exists between the state government and the agents directly involved in managing waste²⁴ and that output waste data should be obtained through application of this act and its regulations rather than through application of the Local Government Act, 1993.

Interviews conducted by Blue Environment Pty Ltd with stakeholders in the SWSA jurisdiction revealed that some of the participants are of the opinion that waste regulations are not always enforced in the region and that legal requirements are not uniformly applied ‘.....some stakeholders indicated a level of dissatisfaction with DPIPWE’s lack of enforcement of waste regulations; there was a view that a lack of resources led to different application of legal requirements in some circumstances’ (Appendix 11, para. 8). In a 2014 report to the Tasmanian Waste Advisory Council (WAC), the same consultants remark that stakeholder factionalism in the SWSA jurisdiction detracts from the enactment of waste regulations ‘...a lengthy process of negotiation, preparation and enactment of regulations, and system development still needs to be undertaken. This process may raise a number of barriers including stakeholder factionalism.’ (Blue Environment 2014, p. 32).

²² Any person involved in general waste activities must obtain environmental approval (reg. 12) for management methods used in the activity (reg. 10) (Environmental Management and Pollution Control (Waste Management) Regulations 2010).

²³ The board of Environmental Management and Pollution Control can demand mandatory environmental audits relating to any waste handling activity (sec. 30) and the Director of Environmental Management (sec. 18) can reasonably demand any information considered necessary in the interest of the environment (sec. 43) (Environmental Management and Pollution Control Act 1994).

²⁴ Seven councils own a landfill or a share in a landfill (excluding Kingborough which has a share in Copping landfill operations but does not share landfill ownership). Nine councils own lease or operate a total of 26 facilities for waste transfer and resource recovery (Blue Environment 2011, p. 31).

From the above, it seems as if there may be dissatisfaction with both the design and enforcement of waste regulations. The following questions are included in the interview protocol to corroborate the data from the corporate documents and to determine the extent of dissatisfaction with poor design and unequal application of existing waste regulations, as these pertain to waste data collection and the public reporting thereof:

Interview Question 3: With respect to national reporting, is the demand for waste data adequately guided by the Tasmanian government?

Interview Question 4: Are existing regulations in respect of the supply of waste data adequately enforced?

5.5 Is the domain of account-giving clear and measurable?

For an accountability relationship to exist, exactly what must be accounted for must be clear and measurable (Lindberg 2013; Miller 2005).

Complex outsourcing initiatives based on coordination and collaboration require a stable political environment, clear legal authority and clear direction with regard to performance targets and measurement (Feiock 2013; Godfrey, Scott & Trois 2013; Heinrich, Lynn & Milward 2010; Lamothe, S, Lamothe & Feiock 2008; Rodrigues, Tavares & Araújo 2012; Smith & Cheng 2006).

Accountability challenges for LGAs arise from a state-local government relationship characterised by the lack of or ill-defined performance indicators (Ball 2005; Ball & Bebbington 2008; Ball, Broadbent & Moore 2002; Dollery & Manley 2007; Purse 2009; Saliterer & Korac 2013).

The SWSA reflects on the lack of performance measurement and considers gaps in waste data to be the result of poor recordkeeping and poor coordination of waste data flows between LGAs, their service providers and the state government by remarking: ‘There are gaps in recorded data in southern Tasmania, both on the amount and source of generation of waste and on the amount and type of materials recovered’ and ‘The lack of good recordkeeping often means there is a lack of knowledge of the types of waste that may have been deposited in the landfill in the past’ (Appendix 9, para. 5 & 9).

In response to the performance measurement problems apparent in the Tasmanian waste management networks, the Tasmanian Waste Strategy directed the establishment of the WAC which provides recommendations regarding the implementation of systems for data collection and management. These recommendations include the setting and measuring of performance targets and public reporting thereon. A timeline for the systems development must be established in consultation with stakeholders (Environmental Protection Authority 2009, p. 15).

Hobart City Council remarks: ‘Monitor the progress of the Waste Advisory Committee (WAC), and its Local Government Representative(s), when put in place’, suggesting that it is unclear what is expected of them, thus awaiting guidance from the WAC (Appendix 11, para. 2). In the absence of clear recommendations from the WAC as to how waste data collection and public reporting systems may be improved, the question arises whether the domain of account-giving is sufficiently clear (Lindberg 2013; Miller 2005).

The following interview question is included to explore if the demand for an improvement in waste data collection systems is sufficiently clear in a possibly uncertain policy environment:

Interview Question 5: To what extent must your organisation’s waste data collection system improve to meet the state government’s expectations?

Dollery & Manly (2007) argue that accountability in local government primarily centres on the duty to provide services to people, establishing a means to evaluate these services and allowing citizens to compare expected and delivered services.

The Tasmanian Waste Strategy reflects on the evaluation and comparison of Tasmanian waste data by remarking that other jurisdictions have more complete datasets compared with Tasmania for waste diversion and resource recovery. The Tasmanian Waste Strategy suggests that in order for Tasmania to benchmark resource recovery and recycling rates with other states, it is crucial to improve the coordination and extent of data collection systems (Environmental Protection Authority 2009, p. 1).

If LGAs believe they are accountable to higher levels of government, it could be reasonably expected that they should have clearly defined key performance areas (KPAs) of improving the accounting for waste data and key performance indicators (KPIs) related to compliance with public policy prescripts, that is, improved data collection and collection systems. A review of the data in Appendix 2 indicates that a number of the LGAs in the SWSA

jurisdiction do not have KPIs related to waste management contained in their corporate planning documents.²⁵ This is a similar finding to those of an Australian study of LGA corporate planning documents that concluded that Victorian LGAs give relatively little attention to planning and measuring performance of the waste management services they provide to their constituencies (Kloot 2001).

No evidence could be found of any LGA having included improvement of waste data collection and collection systems as a specific key performance area in their corporate planning documents, with only Hobart City Council and Glamorgan Spring Bay Council making reference to regulatory waste management prescripts, albeit not specifically for the purposes of complying with the public reporting expectations of the National Waste Policy Implementation Plan or the Tasmania Waste Strategy; for example: ‘Monitor the progress of the Waste Advisory Committee (WAC), and its Local Government Representative(s), when put in place.’ and ‘Compliance with environmental licence conditions’ (Appendix 2, para, 3 & 9).

These observations bring into question whether the domain of account-giving with respect to waste data collection and improvement of collection systems is sufficiently measurable (Lindberg 2013; Miller 2005). The fact that the corporate planning documents do not make reference to the collection of waste data and the improvement of collection systems for national reporting purposes does not necessarily mean it is not considered a key performance area for the various LGAs. In order to establish, firstly, the relative operational importance the participants to the study attach to the federal government’s demand for waste data and improvement of data collection systems and, secondly, whether they consider it someone else’s responsibility and, thirdly, whether actors are waiting for guidance from the state government, the following interview question is included:

Interview Question 6: In compiling the 3-yearly national waste report does your organisation consider the collection of waste data and the improvement of waste data collection systems a Key Performance Area?

If the LGAs in this study are indeed willing to demand and supply waste data and willing to improve waste data collection systems, and if they are clear on what is expected from them,

²⁵ A ‘review of the Measuring Council Performance in Tasmania (KPI) project’ was announced in September 2009 to improve on existing publicly reported performance indicators. Existing state-driven publicly reported KPIs on Tasmanian LGAs’ waste management performance are outdated and limited to cost of service indicators (Hyder Consulting 2011, p. 74).

but the waste datasets for public reporting purposes remain incomplete, the question arises if the LGAs in this study are not constrained to collect outsourced waste data and improve on waste data collection systems.

5.6 A critique of the National Waste Policy Implementation Plan and the Tasmanian Waste Strategy against possible constraints to implementation

Numerous Australian studies, as previously considered in Chapter 2, have found constraints in strategic planning, procurement practices and sustainability and performance reporting in Australian LGAs. These constraints result in challenges for LGAs in the SWSA jurisdiction. For example, SWSA states that it ‘faces increasing waste challenges arising from implementation of the Tasmanian Government’s Tasmanian Waste and Resources Management Strategy and the Commonwealth Government’s National Waste Policy’ (Blue Environment 2011, p. E5(i)).

The Tasmanian Waste Strategy (p. iii) also identified some unique constraints to meeting the strategic objectives of the National Waste Policy Implementation Plan, for example, geographical distance to recycling markets and waste treatment facilities. The Tasmanian Waste Strategy concludes that there is currently little economic incentive to recycle or recover resources in Tasmania, which may imply that there is very little incentive to account for such underperformance.²⁶ The Tasmanian Waste Strategy suggests that amongst other incentives, the development of economic and legislated instruments to reduce waste generation and divert waste from landfill should be considered, which may also facilitate improved waste data collection and improvement in data collection systems through the availability of increased funding becoming available (Environmental Protection Authority 2009, pp. 6, 8 & 12).

The Tasmanian Waste Advisory Committee recommended the establishment of a levy on all waste disposed of to landfill in April 2011, with the LGAT that previously advocated against waste disposal levies deciding in July 2012 to support the introduction of a waste disposal levy at \$10/ton (MRA Consulting Group 2015, p. 1).

²⁶ The 2013 National Waste Report estimates the Tasmanian waste recycling rate at approximately 22% in 2006/2007, whilst the 2010/2011 rate is estimated at 33%, substantially lower than the national average of 60% (Blue Environment 2013, pp. vii & 45). The authors remarked that the improvement may be the consequence of a changed basis of accounting for agricultural waste rather than a factual improvement.

In reflecting on constraints to its own performance measurement resulting from funding constraints, the SWSA remarks that the current low revenue base of SWSA allows for current staffing costs but provides little additional funding for major projects. They observed that increased waste reduction and recovery achievements would require increased funding (Blue Environment 2011, p. 33 & 66).

Improving waste data collection systems which span jurisdictions and organisational boundaries also require competent, well-trained staff (Lacity, Hirschheim & Willcocks 1994; McIvor et al. 2009; Vagadia 2012; Verner & Abdullah 2012). The SWSA suggests that the training of staff of its member councils in aspects of waste management is advisable, implying that enhancement of competencies is required by remarking: ‘.....encouraging the training of staff involved in municipal waste management.....’ (Blue Environment 2011, p. 67).

In considering the SWSA observation that waste data is being omitted, duplicated or misclassified by the member councils and their service providers (Blue Environment 2011, pp. 28,30,31, 57–60 & 71), it is apparent that the flow of waste data is difficult to integrate across, in and between these networks (Ball & Bebbington 2008; Ball, Broadbent & Moore 2002), which may be the result of funding and competency constraints.

Consultants to the WAC confirm earlier findings that these funding constraints exist: ‘However delivery of the strategy has been hampered by a lack of resources (both financial and human resources) and gaps in data collection systems (which in turn hampers monitoring of performance)’ (Blue Environment 2014, p. 31), but caution that revenue raised from the introduction of waste disposal levies may not necessarily be solely applied in pursuing waste reduction and related strategic objectives by remarking:

Levy revenues from current schemes [landfill levies] often offer a source of funding to state governments and are therefore distributed at the discretion of state governments. In such conditions, income for state treasuries and funding for waste diversion incentives become competing priorities for the funds raised through landfill levies. (MRA Consulting Group 2015, p. 9)

To corroborate and expand on the findings of the consultants to the SWSA and the WAC, the following interview question is included:

Interview Question 7: To what extent will the introduction of a waste disposal landfill levy assist you to overcome constraints in your waste data collection system?

5.7 Summary

The accountability obligations of LGAs with regard to the supply of waste data is considered against the stipulations of the National Policy on Waste: Implementation Plan, Tasmanian Waste and Resources Management Strategy, the Environmental Management and Pollution Control Act, 1994 and the Local Government Act, 1993. The response preferences of LGAs and their service providers are explored by considering the domain of account-giving through a critique of the federal government's accountability expectations against possible limitations of LGAs to implement the public policies.

A number of questions are included in the interview protocol to develop a deeper understanding of (i) the accountability relationship between actors in the SWSA jurisdiction and (ii) the response preferences of LGAs and their service providers to policy directives to collect and supply waste data and to improve waste data collection systems.

Chapter 6: Responding to the accountability expectations of the Australian federal government: Governance structures in the SWSA jurisdiction

6.1 Introduction

Governance structures and controls in the SWSA jurisdiction evolved from the interplay between the regulatory frameworks and institutional dynamics. The National Waste Policy Implementation Plan and the Tasmanian Waste Strategy as regulatory frameworks direct collective action such as outsourcing to joint authorities, while the institutional dynamics relate to the application or lack thereof of best-practise outsourcing governance mechanisms. These governance mechanisms are identified as goal congruence, communication and knowledge sharing, contract management and monitoring and management of relationships. The interaction between the application of the regulatory frameworks and institutional dynamics in the SWSA jurisdiction is explored in this chapter.

6.2 The best-practise outsourcing frameworks' governance mechanisms

Accountability in the outsourcing environment encapsulates both the giving and demanding of information, with the client (principal) having a right to demand information and the service provider (agent) having a duty to provide the information (Broadbent & Laughlin 2009; Gray 1992; Jensen & Meckling 1976; Roberts & Scapens 1985). A strong accountable relationship between principal and agent requires the management of data demand and supply, which is essentially a communicative process (Wüllenweber et al. 2008).

Best-practise outsourcing frameworks suggest that the communicative process should be governed by implementing controls to track, monitor and provide feedback on the adequacy of data supplied by the service provider (Das & Teng 2001; Kakabadse & Kakabadse 2003; Verner & Abdullah 2012). Efficiency-seeking outsourcing designed to save costs can be managed through formal process and output controls which refer to the monitoring and management of a contractually agreed quantifiable process or objective outcome, whilst innovation-seeking outsourcing to improve service delivery present challenges and is thus best managed through social controls which refer to the distribution of shared beliefs through corporate governance communication channels such as meetings (Das & Teng 2001; Kang et al. 2012).

The governance tools which underpin the accountability relationships between the state government, individual LGAs and their service providers, or alternatively between LGAs in a multi-agency arrangement and the state government, can either be contract based, relationship based or a combined approach, depending on the nature of the outsourcing arrangement (Rai et al. 2012).

In relationship-based outsourcing arrangements, social controls based on a shared belief that the collection and supply of waste data and improvement of data collection systems for the purposes of national reporting is required and desirable should be aligned between LGAs as principals and their waste management service providers as agents against the federal government's expectations as stakeholder (Das & Teng 2001; Kluvers & Tippet 2011; Manetti 2011; Manetti & Toccafondi 2012).

Das & Teng (2001) observe that process, output and social controls are not limited to contract specification and managerial arrangements but could also take the form of new governance structures or even informal mechanisms. The question arises if and how LGAs in the SWSA jurisdiction govern best-practise outsourcing mechanisms in the context of 'multi-agency management arrangements' and 'active partnerships between governments and industry' (EPHC 2010a, p. 9).

Alignment of goals and objectives between principals and agents against the mutual stakeholder values of improved waste data collection and improvement of data collection systems is considered against the corporate plans of the LGAs in the SWSA jurisdiction. Communication and knowledge sharing, contract management and monitoring and management of relationships as outsourcing best-practise governance mechanisms are similarly considered.

6.2.1 Alignment of goals and objectives between principals and agents

The National Waste Policy Implementation Plan (p. 9) states that

Effective implementation of the National Waste Policy relies on active partnerships, multi-agency management arrangements and multi-disciplinary initiatives by a range of players including governments of all levels, industry and the community. (EPHC 2010a)

‘Active partnerships’ and ‘multi-agency management arrangements’ may result in new governance structures and informal arrangements (Das & Teng 2001) which require an alignment of waste data collection and reporting objectives of multiple parties across various jurisdictions (Carr & Hawkins 2013; Doberstein 2013a; Goliday 2012). The Tasmanian Waste Strategy directs the alignment between principals and agents by referring to a ‘greater integration of effort’ (Environmental Protection Authority 2009, p. 5 & 15).

The Tasmanian Waste Strategy does not give guidance on how such ‘greater integration of effort’ must be achieved other than referring to the pursuance of best-practise guidelines (Environmental Protection Authority 2009, pp. 14 & 18). The Vagadia (2012) best-practise outsourcing framework, comprehensively supported by other best-practise outsourcing frameworks, for example Quinn (1999, 2000), recommends the pursuance of goal congruence or alignment of values as a governance mechanism in relationship-based outsourcing arrangements. Relationship-based outsourcing arrangements are characterised by reduced formal contract management arrangements and goal congruence and may facilitate such ‘greater integration of effort’.

The SWSA and SWS are both examples of what can be considered ‘partnerships’ and ‘multi-agency management arrangements’ in the SWSA jurisdiction, as explained in Chapter 5. SWS, the primary waste disposal service provider to the majority of councils in the SWSA jurisdiction, has as a primary goal the maximisation of financial benefits to its members; for example:

Maximising the net worth of the Authority’s assets; and.....operating and managing both to maximise benefits to Participating Councils. (Appendix 7, para. 4)

It also appears as if financial consideration plays a role in SWS’s complying with environmental best-practise. SWS alludes to the fact that compliance with environmental practise may be restrained by commercial motives by remarking on its strategic objective being

To receive, contain and, **where possible** [the author’s accentuation], utilise waste in accordance with best environmental and **commercial practise** [the author’s accentuation]. (Appendix 7, para. 2)

In contrast, one of the primary objectives of the SWSA is the facilitation of waste management related to sustainability targets. For example, SWSA alludes to performance monitoring of waste minimisation programs and waste stream control:

..... to provide the most cost effective management and facilitation of municipal waste minimisation programs, waste stream control and performance monitoring. (Appendix 7, para. 6)

In contrasting the sustainability aims of the SWSA with the commercial aims of SWS above, some scholars argue that corporatism is an impediment to pursuing and reporting on long-term sustainability goals because organisations with commercial intent are focused on short-term profits rather than long-term ecological sustenance (Burritt 2012; Dijkgraaf & Gradus 2007a, 2008a; Gray 1992, 2002, 2005, 2010; Gray, Brennan & Malpas 2013; Hukkinen 1995).

Agency theory dictates that goal congruence between principals and agents in the SWSA regional network will thus be constrained by the contrasting objectives of the different actors in the SWSA regional network, with those agents primarily serving their own commercial self-interests not aligning themselves with the sustainability objectives of their principals (Jensen & Meckling 1976). This interpretation is supported by SWSA remarking that

The Copping landfill authority has a financial interest in maximising revenue by maximising waste disposed to landfill. This is in opposition to the waste minimisation responsibilities of SWSA. (Appendix 7, para. 8)

The contrasting objectives have implications for the collection and public reporting of waste data. Consultants to the SWSA and WAC remark that waste reduction and recycling in the region has met with limited success but that the introduction of a waste disposal levy may improve the situation:

.....waste deposited at Copping landfill.....is not part of SWSA arrangements. The graph shows that SWSA initiatives to date have had limited success and the overall trend is increasing waste generation in southern Tasmania. (Blue Environment 2011, p. ES(i))

However as the specialised recycling industry grows, landfills begin to lose their competitive edge and it is projected that unless they start investing in dedicated recovery facilities the recycling industry's revenue and profitability will start

decreasing from 2023/24 onwards. It is expected that there will be marked differences between individual landfills as some are better placed than others to take advantage of the levy. It is expected that some facilities will continue growing their resource recovery infrastructure and increase their profitability whilst others might incur net losses. (MRA Consulting Group 2015, p. 23)

It may be tempting for the SWSA member councils' management to avoid responsibility and distance them from accountability for the lack of performance in recycling, for example, under-reporting waste disposed to landfill by categorising it as clean-fill. Actors in the SWSA jurisdiction that own and operate landfills may also be tempted to engage in unsavoury business practices to protect profit margins by purposefully misreporting waste data, for example, accepting hazardous waste as MSW (MRA Consulting Group 2015, pp. 12 & 23). It can be conceived that where waste is not received or contained in accordance with best environmental practise, the parties involved in such practices will be loath to account for waste data due to community dissatisfaction with such practices (Brown & Benn 2009; Hillier et al. 2009).

SWS states that commercially sensitive information will be withheld from public scrutiny, for example:

Subject to any commercially sensitive aspects being separated into a separate section, the Plan shall be made fully accessible to stakeholders and to the public. (Appendix 7, para. 5)

Unscrupulous operators may abuse the lack of public disclosure to avoid accounting for waste data flowing from waste practices not compliant with best environmental practise (Rae & Brown 2009). Unscrupulous operators may well be active in the SWSA jurisdiction, for example:

..... generators opting for cheap disposal options that undercut the financial viability of reputable operators in the industry. (Appendix 11, para. 8)

Although the proprietary interests of contracting parties' interest in knowledge are protected in the commercial environment characterised by customer-vendor relationships, this should not be at the expense of government-citizen relationships in outsourcing regimes of public organisations (Andrews & Brewer 2013; Andrews & Entwistle 2013; Aulich 2011; Perlman 2013; Quinn 2000). Scholars argue that whilst the withholding of proprietary information

privately held is common practise in the private sector, it is incompatible with the principles of accountability and transparency in public sector contracting, which should always be favoured against claims of confidentiality (Andon 2012; Ball 2012; Barton 2006; Brown 2013; Kluvers & Tippet 2010; Purse 2009; Quiggin 1996; Shaoul, Stafford & Stapleton 2012).

From the above, it may be argued that the withholding of commercially sensitive information negatively impacts on the collection and public reporting of waste data and that goal congruence with regard to collection and public reporting of waste data is constrained by commercial intent. The responses by participants to the interview questions in general facilitates a deeper and richer understanding of the contemporary issues related to the withholding of commercially sensitive information and regional waste business practices. Due to ethical considerations no specific interview question is posed.

6.2.2 Alignment with stakeholder values

Stakeholder management can be used as a tool to govern outsourcing arrangements such as inter-local partnerships or municipal corporations. Common goals that align stakeholder values should be adopted around the strategic objectives of these organisations (Bae 2009; Beach 2009; Beach, Keast & Pickernell 2012; Carr & Hawkins 2013; Keskitalo & Liljenfeldt 2012).

Outsourcing practices in the SWSA jurisdiction may have contributed to the misclassification of data disposed at landfill facilities, for example:

anomalies.....in recording municipal waste deposited at Copping and the lack of information available on C&I and C&D waste being deposited at SWSA member landfills, does not allow for meaningful sector-based analysis. (Appendix 8, para. 3)

To overcome the anomalies in waste data, SWSA potentially considers its own role as that of a regional authority leading the alignment of stakeholder values around waste planning practices and alignment of policies and programmes, which include outsourcing, to improve on waste data collection and collection systems, for example:

Establishing SWSA as a referral authority for all such facilities in the region. (Appendix 8, para. 7)

SWSA as a regional coordinator might not be able to resolve all the region's waste data collection and waste data collection system problems if accountability problems rest with service providers' collection systems rather than outsourcing practices, for example:

There is not enough detailed information to determine the generation by sector.....Copping landfill figures would indicate a high percentage generation by the C&I sector. (Appendix 8, para. 3)

It may be argued that only a strong commitment to national reporting on critical waste data as a common stakeholder value that includes environmental sustainability targets, such as measurable reduction of waste to landfill, shared by all councils and their service providers in regional waste management networks will facilitate future adequate collection and public reporting of waste data.

6.2.3 Communication and knowledge sharing

Accountability is strengthened by properly functioning communication channels to facilitate the flow of information, thus making it the most fundamental process to establish and maintain accountability relationships (Wüllenweber et al. 2008).

Communication as a governance tool is given consideration in the corporate plans of LGAs albeit to a limited extent; for example, Derwent Valley Council states

We are committed to openness, communication....,

whilst Hobart City Council states that they

Liaise with other Councils in information sharing. (Appendix 9, para. 1 & 2)

The SWSA identifies communication problems between LGAs and their service providers in vertical principal-agent relationships, for example:

A number of councils do not collect data on the amount of kerbside recyclables collected and/or do not require their contractors to provide such information to them. (Appendix 9, para. 7)

These communication problems appear to extend to horizontal relationships in the SWSA jurisdiction setting, for example:

.....gaps in communication between SWSA and its member councils. (Appendix 9, para. 4)

Communication problems appear to be directly related to poor collection of waste data; for example:

The lack of good recordkeeping often means there is a lack of knowledge of the types of waste that may have been deposited in the landfill in the past. (Appendix 9, para. 5)

The poor collection of waste data in turn derives from a lack of data collection tools such as weighbridges and waste audits, for example:

A regime of regular volumetric surveys of landfills will improve on current data at small landfills where installation of weighbridges is not economically feasible at present. Additional data on the composition of domestic garbage could be gathered by a series of regional waste and recycling audits. (Appendix 9, para. 9)

A consultant's report to the WAC extends the data collection problem to transfer stations by remarking:

...many transfer stations do not record data at all or do not collect data on recovered material. (Blue Environment 2014, p. 33)

With regard to the flow of waste data between the LGAs and the Tasmanian government, it is noted that Kingborough Council commits to a partnership agreement between the state and local government which should serve to strengthen the accountability relationship between the two levels of government:

..... [show] commitment to the Statewide [sic] Partnership Agreement on Communication and Consultation with the State Government. (Appendix 9, para. 3)

Agreement between individual LGAs and the state government will not necessarily improve on waste data and waste data collection systems if such information is to be reported upon collectively. The SWSA suggests that such an approach should be focused on building the capacity of regional networks to collectively collect and publicly report on waste data; for example:

Information-sharing networks which build waste/recovery knowledge and capacity within member councils..... (Appendix 9, para. 8)

The provision of waste data to facilitate national reporting thus presents itself as an institutional collective action dilemma between all the actors in the SWSA network, which may require a changed approach from historical command-and-control governance structures (Bertelli & Smith 2010; Feiock 2013; Girth 2014; Girth et al. 2012). The SWSA observes that the network relationships resulting from inter-local waste contracting and cooperation present new governance challenges by remarking:

..... dissatisfaction with SWSA in its current operational guise.... deficiencies in the current strategic plan and delivery against planned objectives. (Appendix 9, para. 4)

Moll & Hoque (2008) suggest that the development of new information-sharing networks may result in a lack of clear responsibilities and poor internal communication flow. They suggest the introduction of a service-level agreement as a communication device to clearly identify roles and responsibilities when new organisational structures are adopted in the public sector (Moll & Hoque 2008).

In considering all of the above, the most critical aspects to improving communication in the SWSA network appear to revolve around poor recordkeeping and a lack of waste data collection tools. The adequacy of the partnership agreement in supporting waste data collection and reporting is explored by including the following questions in the interview protocol:

Interview Question 8: Has the Partnership Agreement on Communication and Consultation with the State Government improved the collection and public reporting of waste data in your organisation?

Interview Question 9: Has the Partnership Agreement on Communication and Consultation with the State Government lead to an improvement in regional data collection systems such as weighbridges and waste audits?

6.2.4 Contract management

Due to the incomplete nature of all contracts and the risk of opportunistic behaviour by the contracting agent, contractual governance requires that the right agent for the specific circumstances should be selected in such a manner that the agent can still be disciplined in a long-term contractual situation (Bertelli & Smith 2010; Brown, Potoski & Van Slyke 2010; Hart & Moore 1988; Jensen & Meckling 1976).

The LGAs in the SWSA jurisdiction generally do enter into formal contracts for waste management services. For example, Clarence City Council, Derwent Valley Council, Glamorgan Spring Bay Council, Kingborough Council and Tasman Council make reference to waste management contracts, as follows:

Implement new 7 year contract, enter into contracts, Administer external contracts, Manage relevant leases and contracts and Manage refuse services in accordance with contracted requirements (Appendix 10, para. 1, 3, 10, 12 & 13)

Kingborough Council remarks that formal contract management functions are required to support outsourcing initiatives:

Compile a contract register to ensure a more streamlined approach to contract management across the organisation. (Appendix 10, para. 12)

Public services which require highly specified assets are normally governed by longer-term, more relational contracts (Brown, Potoski & Van Slyke 2006; Brown, Potoski & Van Slyke 2007; Brown, Potoski & Van Slyke 2008; Brown, Potoski & Van Slyke 2010; Williamson 1979, 1981, 1987, 1993). These contracts are often based on trust, reciprocity and joint involvement in developing and implementing the contract by envisaging a long-term relationship at the outset (Brown, Potoski & Van Slyke 2006; Brown, Potoski & Van Slyke 2007; Heiskanen, Newman & Eklin 2008; McIvor 2008; McIvor et al. 2009; Vagadia 2012).

Contracts entered into by the LGAs in the SWSA jurisdiction are of a longer-term nature, with especially waste disposal agreements favoured to be 20 years. For example, the SWSA remarks that;

Discussions with the Copping authority indicated that they have a number of long term (20 year) contracts with users (especially councils and waste management contractors)' and 'Waste from the kerbside garbage collection and transfer station skips is deposited at Copping landfill under a 20 year contract (expiring in 2020). (Appendix 10, para. 6 & 7)

A Derwent Valley Council observation provides evidence that relational and collaborative outsourcing specific to waste management services is contemplated between actors in the SWSA jurisdiction:

Arrange a long-term waste disposal and waste transfer system for the municipality in conjunction with other southern councils. (Appendix 10, para. 2)

The base rates in ‘commercially attractive’ waste disposal contracts are

.....only reviewed every 10 years. (Appendix 10, para. 5 & 7)

Collection of accurate waste data requires weighbridges and waste audits, and with these techniques being expensive, if the contract does not allow for regular renegotiation, it may not be possible to negotiate contract amendments to facilitate new and improved data collection techniques (Ball, Broadbent & Jarvis 2006). The following interview question is included in the protocol:

Interview Question 10: In contrasting external contracts for kerbside waste collection and waste recycling with those of waste disposal to landfill; what are the major constraints with regard to managing and monitoring the collection of waste data in terms of the contracted requirements?

6.2.5 Monitoring and managing relationships

Verner & Abdullah (2012) and Dekker, Sakaguchi & Kawai (2013) argue that the risk of failed outsourcing is reduced by combining formal contract management techniques with a relational approach through monitoring and managing of supplier relationships. Combining formal contract techniques with a relational approach allows managers of LGAs to demand information either by means of enforcing contract stipulations or by demanding such information through trust in the relationship (Brown, Potoski & Van Slyke 2007; Das & Teng 2001). Different approaches can be followed at different times, depending on the strength of trust in the accountability relationship (Huber et al. 2013). Whether to rely on relational or formal contracting depends on both the nature of the relationship and the nature and extent of sanctions the principal wants to enforce at a specific moment in time (Girth 2014; Poppo & Zenger 2002).

In addition to formal contracting as determined in the previous section, LGAs in the SWSA jurisdiction also engage in relational contracting or integrate a relational approach in their contracting. For example, Hobart City Council, Kingborough Council and Tasman Council remark as follows:

Provide representation on regional waste authority [*sic*] Management Committees and Board;

Actively participate in the Southern Tasmanian Councils Authority and support the development and implementation of regional strategies; and

Continue to be an active participant in the Southern Waste Management [*sic*] Authority. (Appendix 11, para. 1, 4 & 9)

The STCA (Southern Tasmanian Councils Authority), a regional network with the same member councils as SWSA except for Hobart City Council, provides a range of facilitation services to its member councils. The LGAT, which represents a number of councils across Tasmania, has taken a number of policy positions on aspects regarding waste management practices on behalf of its members. These policy positions appear to be overlapped and conflicted. For example, contrast pronouncements on landfill requirements between SWSA (sustainability objective of reduction of waste disposed at landfill) with the LGAT (cost considerations resulting in resistance to improved landfill standards) and STCA (enhanced service delivery through improved infrastructure and environmental performance):

SWSA..... provide the most cost effective management and facilitation of municipal waste minimisation programs, waste stream control and performance monitoring.....infrastructure developments, implementation of the landfill development strategy.....;

LGAT..... state government should provide adequate resources for waste management.....supports the removal of regulatory barriers to sustainable recycling favours phased implementation of improved standards of landfill management....; and

STCA outlines its priorities as.....improved physical infrastructure..... enhanced economic development.....improved environmental performance.... improved inter-regional cooperation. (Blue Environment 2011, pp. 2, 9 & 12)

Strong resistance against improved standards of landfill management may detract from improved data collection techniques, such as the introduction of waste audits and weighbridges. The question thus arises if the collaborative outsourcing practices, which appear to satisfy the waste public policy prescripts of establishment of ‘multi-agency

management arrangements’ and ‘active partnerships’ between governments (EPHC 2010a, p. 9), have improved on waste data collection and collection systems. The following interview question is included in the protocol:

Interview Question 11: Have or will (your perception) your organisations’ involvement with the SWSA, SWS, STCA and LGAT regional networks result in improved waste data collection systems?

It is also apparent that LGAs contemplate a spectrum of involvement with regional networks. Some LGAs refer to ‘participate’ or ‘cooperate’, others refer to ‘actively participate’, whilst others ‘lead’ or ‘facilitate’ in these networks (Appendix 11, para. 1–10). It could be conceived that different levels of participation in these structures may well lead to different views on accountability for regional waste data; for example, a leading role in the LGAT may imply an active lack of support for new or improved data collection techniques due to their advocacy for a phased approach to more stringent landfill regulation.

Different levels of participation exist for different regional management networks, which may lead to tensions between networks and actors within a network (Bertelli & Smith 2010; Carr & Hawkins 2013). For example, compare Hobart City Council’s observation,

Work in conjunction with the STCA and SWSA in regard to the development of waste management structures within Tasmania,

with a remark by the SWSA,

.....there were seen to be some advantages for incorporation of waste under the umbrella of the STCA. (Appendix 11, para. 2 & 6)

The question arises if the relationships between actors across different networks are constrained by the overlapping and contrasting objectives of the various networks (Lester & Reckhow 2013). Glamorgan Spring Bay Council observes in this regard that

Geography separates our communities, and in the past we have tended to be inward looking and parochial in our attitude to one another. Progress will only come if these past divisions can be broken down..... (Glamorgan Spring Bay Council 2013b, p. 14)

Divisions can be broken down by engaging in face-to-face forums to resolve conflicts, with the use of neutral facilitators improving the flow of information by assisting in resolving

tensions between partners in collaborative network settings (Feiock 2013; Huber et al. 2013; LeRoux, Brandenburger & Pandey 2010; LeRoux & Carr 2010; Rai et al. 2012). Support for such facilitation service can be found in the SWSA remarking that ‘a process for addressing disputes and providing mediation’ should be included in its future charter of corporate governance (Blue Environment 2011, p. 67).

Improved relational contracting in the SWSA may be critical to the improvement of waste data collection and data collection systems: ‘There are also issues of negotiation and consensus around the re-structure necessary to align the governance arrangements’ (Blue Environment 2014, p. 33). The following interview question regarding the governance of relationships is therefore included:

Interview Question 12: How can the monitoring and managing of regional relationships regarding the supply of waste data for the purposes of national reporting be formalised and improved?

6.3 Summary

The governance dimensions of goal congruence, communication and knowledge sharing, contract management and monitoring and management of relationships are possible mechanisms to LGAs for responding to the accountability expectations of the Australian federal government with regard to waste data collection systems. These areas are researched in the interview protocol.

Chapter 7: Interviews: Data analysis and results

7.1 Introduction

This chapter discusses the interviews that were undertaken with participants in the SWSA waste management network. The interview questions were developed from an analysis of the corporate plans of the LGAs within the SWSA waste management network. The case study embraces current and past member councils of the SWSA waste management network (12 in total) and their waste management service providers as well as selected community and other public service representatives.

An analysis of the responses related to each interview question follows. The responses of the LGA managers are contrasted with those of the managers of their waste service providers, community leaders and the state government manager (Charmaz 2006).

7.2 The three-yearly national waste report – data collection

The Australian federal government expects state governments to be accountable for the improvement of waste data (EPHC 2010a, p. 19). The federal government suggests that the state governments discharge their accountability obligations by engaging in outsourcing initiatives such as ‘multi-agency management arrangements’ and ‘active partnerships’ (EPHC 2010a, p. 9).

The Tasmanian Waste Strategy in turn directs Tasmanian LGAs amongst a range of stakeholders to ‘Participate in and support national data collection systems.....’ (Environmental Protection Authority 2009, p. 15). LGAs are also directed to ‘develop and deliver Action Plans as appropriate for their area of responsibility in order to effectively achieve the objectives of Strategy’ (Environmental Protection Authority 2009, p. 6).

The local regional waste data collection system ‘participates’ in the national data collection system which may be considered to be a ‘value chain information management’ system (Burritt 2012, p. 392). Waste data flow in the SWSA jurisdiction is poor and inadequate (Appendix 9), indicating that the outsourcing practices of LGAs do not meet the accountability expectations of the federal government. In considering the scope and nature of this problem, in line with this study’s theoretical approach (Feiock 2013), the concern whether managers of LGAs and their waste service providers have a clear understanding of

their role related to the collection of national waste data (Burritt. & Schaltegger 2012) is addressed by interview question 1:

In compiling the three-yearly national waste report what is your organisation's role in the collection of waste data?

Interestingly, responses are varied and do not necessarily address the primary concern giving rise to the interview question; for example:

.....the term three-yearly national waste report, to be fair and honest, I have not heard of where it's going to be used (Interviewee 5), and

I've not even read it so it can't be that important (Interviewee 12).

The fact that the latter interviewee considered the report as unimportant whilst the former showed a lack of awareness of the relevance of the report suggests shortcomings in the communication of the federal government's intent. Communication is considered the most fundamental process to establish and maintain working agency relationships, thereby strengthening accountability (Bigdeli, Kamal & de Cesare 2013; Christ & Burritt 2013; Wüllenweber et al. 2008). If the federal government does not clearly explain the reasoning behind waste data collection, it impinges on the ability of the LGAs to meet accountability expectations (Reid 2012).

Expectations of accountability in the public sector are based on the agents' acceptance of responsibility, explaining and justifying their actions whilst taking responsibility for the outcomes (Barton 2006). A number of LGA managers indicated that reporting of waste data to higher levels of government is primarily in response to Tasmanian legislative requirements and other regulatory compliance demands, such as EPA legislation, rather than meeting the federal government's expectations; for example:

No, we're not particularly concerned about the federal government, if you like. Our main concern is satisfying the EPA.....we don't really care about that reporting to government; we care about that for our own internal purposes..... It's really EPA requirements. Whatever they want us to submit it in, whatever format, we will do that. (Interviewee 11)

Our organization just collects waste data as part of its annual reporting to the EPA. (Interviewee 5)

The above responses support the findings of earlier studies that Australian LGA managers' views on accountability are to a large extent driven by regulatory prescripts (Kloot 2001; Kloot & Martin 2001). Managers of LGAs see their role in the collection of waste data as being closely aligned to legislative requirements. This view is reinforced by a manager remarking that a move to an outsourced service delivery environment reduces their responsibility for collection of waste data:

In terms of our data, we [will] have few obligations once our landfill closes to report because our permit will be varied to show that we are no longer an operating landfill..... So data collection will be someone else's issue.....in terms of regulatory requirements for data, we will have limited requirements. (Interviewee 9)

This observation suggests that an outsourcing environment may not necessarily improve waste data collection but just shift the responsibility to someone else. The outsourcing arrangements complicate the collection of waste data due to an increased number of dynamic relationships between multiple principles and agents, as discussed earlier in this thesis (Calabro & Torchia 2011; Heinrich, Lynn & Milward 2010).

In line with the earlier responses from the LGA managers, some of the managers of waste service providers clearly state that they report to the Tasmanian authorities in terms of regulatory prescripts; for example:

We report our data to the Tasmanian EPA. We're required to report annually, but we report monthly. (Interviewee 7)

A manager of a service provider also showed a lack of awareness of the relevance of the three-yearly national report, reinforcing the notion that communication from the federal government with regard to its accountability expectations to all role players in the national waste data collection system is lacking:

I don't know anything about the three-yearly annual report. (Interviewee 7)

In contrast with the views of managers of LGAs and their service providers, the Tasmanian government manager viewed the collection of national waste data as an 'active partnership' (EPHC 2010a, p. 9) between state and local government rather than a demand for waste data based on regulatory prescription:

So what our role is basically, we have a [*sic*] – we work with the councils to compile their data, which then becomes the Tasmanian profile of waste data that goes up to the Commonwealth for our contribution to the National Waste Report. (Interviewee 8)

An analysis of the data suggests that local government managers and managers of their service providers do not share the same view as the state government manager with regard to responsibility for waste data reporting to the federal government. The Tasmanian state government manager's reference to 'their data' supports the argument that the responsibility for providing waste data for national reporting remains that of LGAs, thus establishing an accountability relationship between LGAs and the federal government. In contrast, the LGA managers clearly state that they only collect waste data for internal purposes and to report to the EPA.

The LGA managers subscribe to an accountability relationship based on minimum legal requirements (Bebbington & Gray 1993) to the EPA rather than a moral obligation or some other grounds (Gray 2005) to the federal government, whilst the state manager seems to suggest that the Tasmanian state and local governments stand in a partner accountability relationship (Albrecht et al. 2014) with the Australian federal government.

Similar to the earlier observations of some LGA managers, the representative of a community interest group also calls into question if the supply of waste data for national reporting purposes is serving any meaningful purpose:

.....so the data collection should be actually pushing for what it's supposed to do, and that is to show that there is more compliance with the waste strategy – the national waste strategy – which is more recycling but, of course, the data shows there isn't. So, in that respect, data collection, and actually the feedback from that data collection back down the chain should be pushing for better waste management, but it doesn't. Data being pushed up is not doing anything at the moment. (Interviewee 4)

The federal government does not adequately communicate its express accountability expectations to agencies responsible for the supply of waste data and the benefits of supplying such data, thus preventing managers of the state government, LGAs and their service providers from clearly understanding their role in collecting waste data for the purposes of the three-yearly waste report (Burritt & Schaltegger 2012; Reid 2012; Wüllenweber et al. 2008).

7.3 The three-yearly national waste report – data collection systems

In addition to supplying waste data, the federal government also expects state governments to improve regional data collection systems to facilitate the three-yearly national ‘current and future trends waste and resource recovery report’ (EPHC 2010a, p. 19).

Similar to the demand for waste data, the Tasmanian Waste Strategy in turn directs Tasmanian LGAs amongst a range of stakeholders to ‘...support national data collection system.....’ (Environmental Protection Authority 2009, p. 15). Inadequate waste data flow (Appendix 9) may be the consequence of outsourcing practices of LGAs detracting from improvement in the national data collection system rather than enhancing it.

The concern whether actors in the SWSA jurisdiction have a clear understanding of their role of ‘supporting’ or improving the regional waste data collection system is addressed through interview question 2:

In compiling the three-yearly national waste report what is your organisation’s role in the improvement of regional waste data collection systems?

In contrast with the responses in interview question 1, a number of managers reflected on active involvement with the improvement of the regional collection system, suggesting the acceptance of responsibility (Barton 2006) for this domain of accountability (Lindberg 2013); for example:

Well, we worked really closely with the State Government back in '06, '07 to develop a reporting tool, which the State Government adopted and it's still on their website. (Interviewee 9)

I actually helped set up that spreadsheet for the EPA, and just [*sic*] to try and get apples with apples across councils and facilities..... So that was an attempt to try and standardise the waste classifications, if you like. (Interviewee 11)

Most of our activity has in fact been involved in trying to build and maintain support within local government for reform of the regional waste arrangements. (Interviewee 1)

An analysis of the data supports an argument that managers of LGAs and their waste service providers are indeed willing to accept responsibility and accountability (Gray 2005) for

improving the regional 'value chain information management' system (Burritt 2012, p. 392) through collaboration and partner actions (Bertelli & Smith 2010; Kluvers & Tippet 2010) as contemplated by the National Waste Policy Implementation Plan (EPHC 2010a, p. 9) and The Tasmanian Waste Strategy (Environmental Protection Authority 2009, pp. 3 & 9).

Worthy of consideration by policy makers is the observation of Interviewee 5 that past improvement of regional collection systems was the result of the need for improved internal management accounting systems. This observation supports the recommendations of an earlier Australian study that waste management accounting systems of LGAs can be used as a foundation to improve on public environmental reporting systems (Qian & Burritt 2009; Qian, Burritt & Monroe 2011):

.....we just tried to improve our own numbers because the numbers were very important for us..... So the waste data was as important to us as [the] EPA... But yeah, I will say that we contributed for the regional betterment [*sic*] of data collection.

Some managers of waste service providers clearly state that they are not responsible for the improvement of regional collection systems, thus suggesting that the accountability expectations of the federal government that waste data collection systems are somehow naturally improved by outsourcing initiatives such as 'multi-agency management arrangements' and 'active partnerships' (EPHC 2010a, p. 9) is naïve. Stronger support is found for the notion that managers of LGA service providers primarily respond to minimum legal requirements in accountability relationships with the Tasmanian government (Bebbington & Gray 1993); for example:

To my knowledge, we don't actively get out there to do that. (Interviewee 10)

.....we don't have any direct contract with the Federal Government. We have a contract in effect with the State Government via the EPA and our permit, which says what type of data we're required to provide. (Interviewee 7)

Support for the McIvor (2008) commercial outsourcing management framework being able to meet the outsourcing expectations of the federal government is found in the observations of a manager who argued that through outsourcing regional waste data collection systems, economies of scale can be achieved (Williamson 1979) and expertise can be obtained (Niskanen 1971, 1972). In line with the McIvor (2008) outsourcing framework, the manager suggested that the underlying causes of poor performance and how these processes link with

other processes in the SWSA jurisdiction should be understood prior to embarking on the federal government's outsourcing suggestions:

So every council is investing their own money in their investments but if you get these singular [*sic*] companies who are competent, they can do all of it together. So it becomes easier but then I still feel they need to first of all gather data because government – again [needs] to know what's happening. (Interviewee 6)

It is interesting to note that environmental interest groups believe they have an important role to play in improving regional waste data collection systems and even without formal public participation processes, inadvertently contribute to meeting the accountability expectations of the federal government (Benn & Jones 2009; Brown & Benn 2009; Lloyd-Smith 2009) through applying community pressure in demanding waste data; for example:

Very few people had really taken up the gauntlet of looking at waste management in Tasmania as a whole and trying to understand the state of play..... with [name withheld] getting on board and looking at waste management overall, and the local community group pushing hard, I think there has actually been finally [*sic*] some people starting to look at what's happening. (Interviewee 3)

The Tasmanian state manager commented on the lack of communication from the federal government constraining the improvement of regional waste data collection, supporting a similar interpretation reached in interview question 1. The state government manager's observations suggest that a lack of guidance from the federal government constrains the Tasmanian government's efforts to supply national waste data. This is especially apparent in aspects of defining and categorisation of waste. For example:

.....the way we classify waste is different. The way we define waste is different. So what that means for the Commonwealth Government.....they first of all have to develop a knowledge base of what it is that person's saying, or that jurisdiction's saying,

.....because there have been changes in the structure of senior officials groups at a Commonwealth level, with the change of government, they changed the structure of those [working] groups. And most of those – a lot of the work that was been done ceased. (Interviewee 8)

The actors in the network are willing to accept responsibility and accountability (Barton 2006) and that the natural development of individual environmental management systems should be considered when contemplating regional waste data collection systems (Qian & Burritt 2009; Qian, Burritt & Monroe 2011). It also appears as if a stronger legal mandate is required as to how these systems must be improved (Brown, Potoski & Van Slyke 2006). Improved communication from the federal government to lower levels of government is again highlighted as an area that requires attention (Bigdeli, Kamal & de Cesare 2013; Reid 2012).

7.4 The demand for waste data – guidance by the Tasmanian government

The Tasmanian Waste Strategy directs Tasmanian LGAs to ‘Participate in and support national data collection systems.....’ (Environmental Protection Authority 2009, p. 15) and to ‘develop and deliver Action Plans as appropriate for their area of responsibility in order to effectively achieve the objectives of the Strategy’ (Environmental Protection Authority 2009, p. 6).

The outsourcing practices of LGAs may affect how such action plans are developed and delivered, which in turn may impact whether the accountability expectations of the federal government are met. In this regard, a consultant’s report to the Tasmanian WAC suggested that the state government’s guidance related to the above directives is lacking in Tasmania (Blue Environment 2014, p. 32). Interview question 3 addresses the concern that guidance by the Tasmanian government is not adequate to establish a clear accountability relationship (Lindberg 2013) between LGAs and their service providers on the one hand and the Tasmanian government on the other:

With respect to national reporting is the demand for waste data adequately guided by the Tasmanian government?

Brown, Potoski & Van Slyke (2010) argue that where a principal and agent’s objectives are not fully aligned, based on the theory of incomplete contracting (Hart & Moore 1999), parties to the agency relationship naturally migrate to an antagonistic, lose-lose situation unless they negotiate an amendment to the agreement. In this instance, the quality of waste data suffers if LGAs and service providers do not have a clear picture of what is acceptable and unacceptable behaviour (Lindberg 2013). The responses of the LGA managers strongly

suggest that they do not have a clear picture of what is acceptable and unacceptable behaviour required to establish an accountability relationship; for example:

A hard question, in the [time frame withheld] years I have been here, we haven't been given directions one way or the other to change. The only one I can think of is the inert waste..... Then we have got [*sic*] guidance in the past about some controlled wastes. (Interviewee 5)

Yes and no. I mean, they're getting better at it. The past decade or so there's been a fair bit of inaction, I guess, by the EPA in relation to waste and guidelines.... I think waste data and waste classifications is one of their priority areas to look at and improve. I don't know that they've done an awful lot about actually making it happen. (Interviewee 11)

I don't think so. No, I think the state government takes a very low-key approachState government doesn't seem to be in that area at all [*sic*],maybe it's lower down on their priority list. (Interviewee 12)

This view is supported by the manager of a waste service provider:

No, it could be better..... It's fairly non-prescriptive, if you like. (Interviewee 10)

Managers of LGAs and their service providers evidently perceive the demand for waste data to be incomplete (Brown, Potoski & Van Slyke 2010) and migrate to an accountability relationship based on providing the minimum data legally required (Bebbington & Gray 1993; Hart & Moore 1999).

This interpretation is supported by Interviewee 6 arguing, as a self-interested agent in a classic principal-agency relationship (Jensen & Meckling 1976), that the data are available and that it is up to the state government to offer incentives (Miller 2005) to extract the data necessary for their purposes:

I wouldn't say it's not guided ...as the local government needs the data. They need the data and it's up to the state government to use what there is to get the best and accurate [data].

This information asymmetry between principal and agent is the result of an incomplete contract, with resulting moral hazard to the agent (Hart & Moore 1999), which leads to an

accountability relationship based on minimum legal requirements (Bebbington & Gray 1993). This detracts from high-quality waste data. An observation by the manager of a waste service provider that they are unsure of how to categorise certain types of waste lends support to this interpretation:

I do know that the categories that we report to the EPA - they're a bit vague in guidance [*sic*] as to which category which type of waste belongs in. And we've had a bit of confusion about what's commercial and industrial. (Interviewee 7)

The councillor argued that current waste policies are not adequately guided due to a lack of resources committed by the Tasmanian government in implementing the National Waste Policy:

There are these aspirational values which are committed, but there's a huge policy disconnect in actually seeing that at [a] very [*sic*] localised level, how do we actually promote this? What we doing to facilitate some of these initiatives? Victoria's invested a lot of money in their systems, and there's no other way to do it. You can't just do it on goodwill and hoping [*sic*] for a windfall somewhere along the way. (Interviewee 2)

From the above data, it may be argued that the lack of resources committed by the Tasmanian government equates to a lack of incentives for the agents to reduce the information asymmetry with their principals, which can be interpreted to result in an antagonistic accountability relationship based on minimum legal requirements (Bebbington & Gray 1993; Brown, Potoski & Van Slyke 2010; Miller 2005); for example:

We report to the national authorities as required. We don't over-report I suppose you could say. It's only as required as [*sic*] and when directed. (Interviewee 10)

Miller (2015) explains that where a principal experiences moral hazard, such as unpopular closures of US military bases, an attractive option is to avoid such moral hazard by delegating responsibilities to lower levels of government. The lack of guidance with regard to waste data may be explained by the Tasmanian legislature not considering waste management as a priority (Interviewee 11; Interviewee 12) to avoid decisions being viewed unfavourably by the electorate.

Support for the argument that the Tasmanian government is delegating its responsibility for waste data collection to lower levels of government and their agents to avoid accountability to the electorate is found in the observations of the representative of a large environmental interest group:

No. In fact everything to do with the waste management sector in Tasmania lacks government oversight. Basically as a sector and as a responsibility, it's been hand-balled to municipal governance [*sic*] and to councils, and I believe this is one of the things that really needs to change to help reform the Tasmanian waste management sectoris for government at the state level to become more involved. (Interviewee 3)

The representative of a localised environmental group supported views of other participants that the Tasmanian government's perceived lack of guidance with regard to the collection of waste data is the result of the lack of prioritisation of all aspects of waste management:

I think from the little bit that I saw with reporting to the federal governmentthrough the reports on waste management, it was more or less nothing happening..... Because I think probably [*sic*] state government doesn't see it as a priority. Absolutely not, and they've obviously got their hands full with lots of other things, and I think until there's a push one way or the other through the data collection showing that Tasmania is falling further and further behind other states with waste management, it's just going to be more of the same, yeah. (Interviewee 4)

The Tasmanian state manager argued that from a managerial perspective, the demand for waste data is adequately prescribed by the relevant waste regulations but conceded that some uncertainty exists as to how certain construction & demolition (C&D) wastes should be categorised. The manager's observation that recently improved communication structures address the concerns of actors in the regional waste management network lends support to the earlier argument that communication is a critical element of governing a strong accountability relationship:

Waste data is required under Environment Protection Notices, and we have classed how we expect it to be presented, but what we do is have ongoing conversations with the regional authorities and the big landfills – where there are questions. And so we

reconstituted a waste data working group recently, to just chase up clean fill [category of waste] in particular, and chasing some numbers around that.

The state government manager contrasts managerial accountability (Ball & Bebbington 2008; Ball, Broadbent & Moore 2002) with accountability through the traditional convention of democratic oversights of parliaments by arguing that the relevant minister should be held accountable for implementing and reporting on policy implementation (Gains & Stoker 2009). The manager holds the view that a perceived lack of guidance may be the result of inadequate legislation defining categories of waste and also a lack of political drive by remarking:

It's not from a legislative perspective..... so that is relying on a minister saying, 'Green light time. Let's just do this thing.' So we haven't got that at this stage. But then what would happen then is there would be formulas, mechanisms, governance structures legislated. At the very least, a lot of that might end up in a policy, but even things like defining waste, defining what is a leviable waste and what is a non-leviable waste is really, really significant because a number of people will look at what they can get away with.

Lindberg (2013) concludes that an accountability relationship cannot be evaluated if there is no clear picture of what is acceptable and what is unacceptable. A perceived lack of guidance in relation to waste data collection for public reporting purposes may be closely linked to political and legislative shortcomings, thus lending support for the argument that the relevant state minister should ultimately be held accountable for implementing and reporting on federal policy implementation (Gains & Stoker 2009).

As discussed in earlier chapters, Brown, Potoski & Van Slyke (2006) found that legal mandates that emanate from the legal architecture frames a specific public service delivery, which in turn determines the boundaries within which public managers can operate. If risk-adverse public managers and managers of their waste service providers perceive the laws and regulations that govern their organisational and service delivery environment to be lacking or outdated, they are unlikely to meet the expectations of higher levels of government since their roles and responsibilities are not clear (Miller 2005; Verner & Abdullah 2012).

7.5 Enforcement of existing regulations for the supply of waste data

Reference is made in an LGA corporate plan that waste regulations are not always enforced in the region and that legal requirements are not uniformly applied (Appendix 11, para. 8). Lindberg (2013) holds the opinion that accountability relationships can only exist if principals are willing and able to sanction agents.

The theoretical framework (Feiock 2013) suggests that the scope and nature of the problem resulting in poor regional waste data should firstly be ascertained before policy response preferences and mechanisms available to LGAs, such as outsourcing practices, are considered. Interview question 4 addresses the concern that a lack of sanction of non-compliance with waste regulations by the Tasmanian government (principal) negatively impacts on LGAs and their service providers' (agents) willingness to supply waste data (Lindberg 2013):

Are existing regulations in respect of the supply of waste data adequately enforced?

Interviewee 5 confirmed that their supply of waste data is not subjected to any form of verification or validation, with limited policing of the accuracy of data taking place. The manager suggests that because their data are correct, a relational governance approach based on trust (Brown, Potoski & Van Slyke 2006) rather than a traditional command-and-control approach is appropriate (Bertelli & Smith 2010);

We give the right data. So, I don't know. I wouldn't say more than that.....it's not like an examination where they are looking for the corrections [*sic*]..... It's more kind of a trust I would say between the state government and the local government.

Interviewee 1 held a strong contradictory view by arguing a complete lack of sanction is apparent, with inadequate auditing of the waste data, which would suggest that in terms of the Lindberg (2013) accountability model the agents cannot be held accountable for inaccurate or incomplete waste data:

....the data collection is obviously awry. There's something not right there. And I guess the issue there is, what audit process does the EPA actually submit this data collection to?.....there is no consistent methodology for recording that data, so I think the EPA just accepts whatever data is submitted.

Interviewee 11 also held the opinion that some facilities are not reporting waste data, suggesting a lack of policing of the relevant regulations. The manager again made reference

to the inadequate categorisation of waste, supporting earlier comments from the state government manager that improved political accountability must precede managerial accountability (Brown, Potoski & Van Slyke 2006);

The data collection.....in the last ten years, has certainly improved from what it was. But there are obviously still gaps and it all boils down to me to a waste classification, and the fact that there probably have been some facilities that aren't even reporting, so we're not capturing a lot of that stuff.....there's definitely a gap between the estimations of waste production, and the numbers that the EPA gets back for waste disposal. There's a gap there.

Interviewee 1 reflected on capacity constraints of both the EPA and smaller councils to effectively enforce and administer waste data regulations, suggesting that funding and administrative solutions warrant stronger political guidance. This indicates that strengthening political accountability (Gains & Stoker 2009) rather than managerial accountability (Ball, Broadbent & Moore 2002) should be the focus of improving the regional waste data collection system:

The EPA has very limited investigative powers because of budget cuts over the last few years. I don't know what's happened in recent times but a couple of years ago, I think they had one investigator looking after all of Tasmania... this is really where the EPA needs to – that really is a regulatory function. You need a consistent approach across the state, instead of relying on councils to police [waste regulations] themselves. Again, it all relates to the capacity. We've got councils with total budgets of less than \$5 million a year and staff of 20. You just simply can't expect them to buy in, let alone have in-house expertise.

The general managers of waste service providers supported the above argument that policing of data collection by the EPA is constrained by limited resources:

No, I don't think so. EPA went down the path of waste tracking, and abandoned the waste tracking process. It became too big a job for them. They were under-resourced and they decided not to pursue – they thought they had more important things to do in the regulation and the policing of some of the regulations in environmental control. I think rightly so, that they said, okay, you guys have got pretty good systems there.

We're just – we're better off auditing your system rather than trying to create one of our own. (Interviewee 10)

I think they're under resourced and totally inefficient, and it's the combination of those two that mean that they don't want to be communicated with. And if they are, they want to just file it and ignore it..... Because it's all downloaded into Excel databases, it's fairly easy to manipulate, in the best of sense of the word manipulate not fudge the figures. (Interviewee 7)

The former interviewee hinted that a systems-based approach to auditing waste data may be the most appropriate methodology to verify and validate waste data, whilst the latter observed that existing data collection tools are fairly easy to manipulate. The latter manager also questioned the ability and willingness of the EPA to communicate with agencies responsible for supplying waste data, thus negatively impacting on the accountability relationship. These observations lend support to the earlier argument that the regional data collection system should be automated and integrated across agencies with built-in controls communicated to agencies to prevent duplication and manipulation of source data.

The councillor from a small LGA draws attention to the fact that some waste regulations that may affect waste data are not adequately policed in small councils, which may be interpreted that unlike larger councils the waste data from smaller and rural LGAs are inaccurate and incomplete:

.....for a number of small councils; they're very happy with the EPA that doesn't do much. And I know that for a fact from officers of [names withheld]. And look, we've got problems in our council. I'll give you an example; green wastes – huge volumes of green waste are brought into some of our waste transfer stations.....it is waste. It must be treated accordingly. But what happens is - somebody puts a match to it. Now every time that happens, that's a breach if it [*sic*] doesn't have approval of the EPA for the simple reason that you can't burn waste. It's against the law. You need a permit to do it. (Interviewee 2)

The representative of a Tasmanian environmental interest group echoed the views of other participants that waste streams are not adequately audited, citing inadequate resourcing of the EPA and inadequate political guidance through the WAC:

I believe that there are a lot of particular waste streams in Tasmania that are not especially well-audited. Such things as [sic] tyres, construction and demolition and material, these sorts of things..... it was definitely their clear expression to me was [sic] that they didn't have the resourcing to enact that legislation [controlled waste]. Now whilst there is a specific branch within the EPA that deals with waste management, I would suspect it is deeply under resourced. Even the figures that the EPA supplies to national authorities appear to be largely speculative in many instances. So they're really just relying on, if you like the gate data in specific landfills, and it's not actually often correlating with, for instance projected generated waste from specific waste generators . So there is a lot that could be done. The Waste Advisory Council seems to be a very poorly run bunch in the whole waste management setup. (Interviewee 3)

The state manager is of the opinion that the weighbridge-driven collection facilities are adequately overseen but confirmed that smaller councils do not always conform to existing waste regulations related to waste data:

In the south, you've got [names withheld]. All weighbridged based now..... The bigger councils are fine because for them, with their weighbridges – it's essentially entered, it's done. Send it in an email. It's not more than – work that they'd be doing for their own annual reporting anyway. And for the councils that have other councils as clients, they are billing them all the time anyway, so they know where their wastes are coming from. So for the bigger councils, we've not had problems, but with the smaller councils, it is, because the personnel change – turnover quite significantly in the engineering areas of smaller councils. A lot of the data is collected by consultants on behalf of the councils, so it's pretty low on the pecking order. They're the ones we have a – [problem with]. (Interviewee 8)

Analysis of the data suggests that the EPA may be under-resourced with regard to the auditing of waste streams and enforcement of existing waste regulations as it pertains to waste data collection. As accountability is mostly framed in legal terms (Bebbington et al. 2007) and the minimum duty of accountability is that of compliance with the law and reporting on the extent of compliance (Bebbington & Gray 1993), some improvement in the regulatory oversight function will improve the accountability relationships between local government and their service providers on the one hand and the Tasmanian state government

on the other (Gains & Stoker 2009; Lindberg 2013; Miller 2005). This in turn will contribute to meeting the Australian federal government's expectation of improved regional waste data and data collection systems.

7.6 Government's expectation for waste data collection systems to improve

In aiming to meet the strategic objectives of the National Waste Policy Implementation Plan, the Tasmanian Waste Strategy directs the WAC to give guidance as to how regional waste data collection systems should be improved (Environmental Protection Authority 2009, p. 18). An analysis of data from the corporate reports suggests that at least some LGAs in the regional network are anticipating guidance in this regard; for example:

.....Monitor the progress of the Waste Advisory Committee (WAC), and its Local Government Representative(s), when put in place. (Appendix 11, para. 2)

Question 5 addresses the concern that the absence of clear guidance from the WAC detracts from a sufficiently clear domain of account-giving (Lindberg 2013; Miller 2005) for the purposes of establishing an accountability relationship:

To what extent must your organisation's waste data collection system improve to meet the state government's expectations?

Two LGA managers support the argument that they accept responsibility in principle, whether directly or indirectly, for the improvement of waste data collection systems (Barton 2006). They responded in a reactive rather than a proactive fashion, lending support for the argument that the preference is given to account for improving on data collection systems based on legal minimum requirements (Bebbington & Gray 1993).

The first LGA manager appeared very certain about what is required to improve their individual data collection systems by remarking:

We definitely need improvement. But what I do know is the scale of improvement needed depends on what the demand is.....I don't believe we need to change the system completely, overhaul, little tweaking of small, small things may be the solution to improvement. (Interviewee 5)

In contrast, the second manager was more uncertain, showing a preference for a regional structure to take responsibility for the improvement of the regional data collection systems through collective action (Brown, Potoski & Van Slyke 2010; Delabbio & Zeemering 2013; Feiock 2013) by commenting:

So the whole idea of all the data collection and so forth....., should be one of those ones that's considered by that more regional type body [*sic*] as compared to individual councils. (Interviewee 12)

In responding to the question, a number of participants chose to focus on capacity constraints to supply waste data rather than the perceived lack of clarity about exactly how waste data collection systems should be improved. The improvement of waste classifications and communication across departments and jurisdictions were again highlighted as problematic: for example:

I think we've suffered traditionally from different government authorities classifying waste in different ways. So the Department of Environment federally, the EPA here, the Office of Climate Change, for example, Department of Agriculture, Australian Bureau of Statistics, all have their own ways of classifying things, and they all ring up on a different day, and they all want the same thing within a week..... we know how to actually do it. But that's probably the most frustrating thing that we need to deal with. (Interviewee 9)

A few managers again drew attention to the importance of effective waste data collection tools to improve waste data collection systems. For example, the first respondent below drew attention to weighbridges and software as being a prerequisite to improving waste data collection systems, while the second respondent remarked that the software should be integrated across agencies and jurisdictions:

People still don't have weighbridges. I would say that was the first step towards improvement. [The] Next step is the software itself. Now we use a system called [name withheld].....specifically for waste companies so some of the other councils and clients use it..... (Interviewee 5)

But most people, I think, are running the same software these days. I think that's an important factor. It would make sense if everyone was using the same sort of software,

and it had the same capabilities, and also the same waste categories, and things like that. (Interviewee 11)

In addition to improved waste categorisation and automated systems, staff training and departmental restructuring are also considered areas where improvements can be made; for example:

But every site in this day and age should have the relevant capability. If the federal comes in and says, 'You need to report like this,' it should be as simple as just changing all your stuff, and away you go, and being able to do it. Probably a bit of [sic] training sessions for your operators to appropriately identify what the waste classification changes are..... in days gone by it would just be a tip operator who would go down and sit in the toll booth and man it. But it creates a whole range of issues, incorrect classifications and similarly if they're not trained in customer service or they're not trained in cash handling. (Interviewee 11)

Interviewee 5 cautioned that all improvements are subject to cost considerations (Williamson 1979), lending support for the argument that the principal/agent relationship will remain constrained if no incentives are negotiated by the regulatory authorities (principal) with the waste data providers (agents) (Hart & Moore 1999; Jensen & Meckling 1976):

We'll have to put more staff, but I doubt if that will happen because these days, it is about business and unless it is done – I mean, I'm afraid to say it, environment or safety and things like that, they're all priorities. But they're all, at the end of the day, counted with dollars.

In contrasting the views of managers of LGAs with those of the managers of their service providers, Interviewee 7, a manager of a waste service provider, observed that no need for improvement of collection systems is considered necessary as none was demanded by the regulatory authorities, strengthening the argument that suppliers of waste data consider themselves to be accountable based on minimum legal requirements:

No, they haven't said that they're not happy with the data we give them.

In line with the responses of most LGA managers, Interviewee 6, the senior manager of a service provider, chose to comment on constraints in improving waste data collection systems.

The manager commented that additional expertise is required regarding contract management and management of the new generation of consolidated transfer stations:

Knowledge of multiple contracts or a giant transfer station [will be of assistance].

Interviewee 10, the general manager of a service provider, echoed the sentiments of other interviewees in earlier responses that the seamless integration of automated waste data collection systems designed to prevent duplication of data capturing would be a major improvement:

It'd be much easier if we were working with a format the same as [*sic*] the Government was working with, and that's not always the case. That would be an improvement, and I think we've got – we track everything that we do, so I don't think there's any – there's always room for improvement. That's obviously how we do it, and the ease with which we can extract it, but I don't think we need to improve on the actual diligence of tracking, if you like. It's just the tools you might use.

The manager argued that a networking approach will offer major benefits to improving the regional waste data collection (Feiock 2013). The observation that leaders in the SWSA network should reach out to other less-connected actors in the network supports the findings of local government networking studies in the US (Delabbio & Zeemering 2013; Minkoff 2013):

I guess we've got a limited impact as to what we can influence. However, that being said, we're one of the major facilities in southern Tasmania and pretty much just to act as a leader I guess, and as an information source for anyone wanting to look at a new weighbridge software or recording software, they can come and see what we do. (Interviewee 10)

The councillor and representative of an environmental interest group observed that fellow councillors and officers of small LGAs are not necessarily interested in any aspect of waste data or even functional aspects of waste management, suggesting that no accountability relationship exists because no acceptance of responsibility is apparent (Barton 2006; Lindberg 2013). The waste data asymmetry especially between small, rural councils and the regulatory authorities will therefore remain until such time as a more complete contract is negotiated (Hart & Moore 1999; Miller 2005) through improved communication between the

regulatory authorities and councils (Bigdeli, Kamal & de Cesare 2013; Christ & Burritt 2013; Rai et al. 2012; Reid 2012; Wüllenweber et al. 2008):

If you asked one of my colleagues regarding the municipal waste program, most of them wouldn't know anything about it. They'd know where the waste transfer stations were, but as far as the workflow and as far as where the stuff actually ends up, I don't think they're aware of any views [on the council waste program]. They probably wouldn't necessarily be aware that data is collected. This is just sadly recognition of the fact that it's a really low issue on anybody's concerns..... Council staff is aware of their obligations, but it's just that they don't take the EPA or the environmental permits seriously. They've always burnt green waste so why is it a problem? And if there are a few car tyres in the middle of it, ah, who cares? (Interviewee 2)

There are counsellors that are not particularly interested.....in what's happening with waste management on our council. (Interviewee 4)

The state government manager again highlighted the categorisation issues regarding C&D wastes which require attention. The manager also echoed the sentiments of other participants, both in the public and private sector, that an IT-based approach to the integration of waste data will strengthen regional waste collection systems by avoiding double-handling and the possible duplication of waste data:

There are some problems with estimating what is coming out of the transfer station that is C&I and what is MSW. That's a problem, and there are some conversations that we need to have around that..... I think the single most important improvement we could get would be software programs within the weighbridges that had a standardised EPA report, that we saw signed off on, that with the data that went in, with minimised handling - the number of times someone inputs the data. So ideally, the toll booth operator's entry is the final entry, and the only entry that occurred, and everything else was done by the software program so we're just basically printing reports with us not doing any data entry. That would be the big change. (Interviewee 8)

An analysis of the data above does not suggest that participants are uncertain how to improve data collection systems. The domain of account-giving appears to be sufficiently clear (Lindberg 2013; Miller 2005) to establish an accountability relationship. Some participants reflected on the fact that improvements will be affected as a reactive regulatory response as

and when required (Kloot & Martin 2001), thus again suggesting an accountability relationship based on minimum legal requirements (Bebbington & Gray 1993). Improvements in data collection tools and waste identification processes can improve communication and strengthen the various accountability relationships (Bigdeli, Kamal & de Cesare 2013; Goliday 2012; Wüllenweber et al. 2008).

7.7 Waste data collection and reporting as a key performance area

In analysing the corporate plans of LGAs, no evidence could be found of LGAs having included improvement of waste data collection and collection systems as a specific key performance area in their corporate planning documents. Only two LGAs made reference to regulatory waste management prescripts, albeit not specifically for the purposes of complying with the federal government's public reporting expectations (Appendix 2, para. 3 & 9).

Interview question 6 addresses the concern that the actors in the network, firstly, do not attach operational importance to the federal government's demand for waste data and improvement of data collection systems (Walker 2008), and, secondly, that they consider it someone else's responsibility (Dubnick 2005) and, thirdly, that they are waiting for guidance from the state government (Burritt & Welch 1997):

In compiling the 3-yearly national waste report does your organisation consider the collection of waste data and the improvement of waste data collection systems a Key Performance Area?

In comparing the observations of LGA managers, Interviewee 1 and Interviewee 12, it is apparent that none considers the collection of waste data and improvement of data collection systems as a KPA for their respective LGAs. Interestingly, the first respondent indicated that it should be a KPA in future, whilst the second respondent indicated that the information asymmetry will remain as long as the report is not considered to be of any value. These observations lend support for the argument that improved communication from the federal government to explain the value of national waste reporting is required:

As far as us doing anything about it, no.... And certainly in a future iteration of the organisation, data collection I would like to think would actually be one of those key functions. At the moment it's not. (Interviewee 1)

Probably not at the moment;-because it's not actually providing me feedback that's actually that useful. I've not even read it so it can't be that important. So I mean effectively, no..... In other words – in summary – there's no point getting a report that's at a very high level, You go, 'Oh, that's interesting.' and throw it on the shelf then never to be seen again type of thing, it's got to be something that has some sort of guts in it or some sort of meat in there that you can actually take away and say, 'Yeah, I'll do that comparison there and if I want to, then I can actually report that back to council via a standard benchmark.' Something like that to say this is how we're travelling as compared to other people. (Interviewee 12)

The remaining three managers all considered waste data to be important from a stakeholder and transaction cost perspective, with no consideration given to national reporting. The remaining life spans of landfills appear to be particularly important to these managers in their collection and reporting of waste data: for example:

So that's the kind of community stakeholder stuff we're doing at the moment, saying, 'Well, look, we're doing a new waste strategy, looking at really seriously trying to reduce waste, and we're doing it because we're filling up our landfill. We might be shut in 15 years, but if we can do some really wicked stuff in the next 5, 10 years, we might be there for another 40 years, and delay all these costs'. (Interviewee 11)

...even for our own KPIs [key performance indicators], we use it to say how much waste we received indirectly that would also feed into the accounts and to how much money it made in fees and charges. Then we set our fees and stuff based on that record..... it's always been questioned from a political level who gets questioned by the public who elects them. How long do we have the length [*sic*] in the tip? [Landfill]..... The life of the landfill is very crucial..... So we need the data as much as we have to have to report to the EPA. (Interviewee 5)

Waste data's critical for us running a business, particularly in terms of efficiency, also in terms of rehabilitation of our landfill. So if we look at our landfill, we're looking 10 to 15 years depending on – you can make one or two decisions with landfills: you fill them as quick as you can, and although your costs are divided over a shorter period of time, the revenue's higher. But you face the reality of – like many municipalities all around the world – this is your last landfill. Is it better to get money short term or is it better to keep space long term? (Interviewee 9)

In comparing the responses of the managers of waste service providers with those of LGAs, it is apparent that the managers of waste service providers show more awareness of the need for collection and public reporting of waste data. In comparing the individual responses of managers of waste service providers, a general manager confirmed that data collection for national reporting purposes does play a key part in their operational decision making, with the second at pains to highlight that they consider statutory reporting to the Tasmanian EPA rather than the federal government a performance area:

As I say [*sic*], we're required to report 12-monthly and three-yearly to [name withheld] as well, so it forms a key part of that reporting structure as well. (Interviewee 10)

No, it's not, because we don't have any direct interaction with it. So one of our indicators is whether we comply with the EPA's requirement to submit our waste data, split up [in] the way they require it [and] within the time frame that they specify. So that's one of our – I wouldn't say it's a key performance indicator, but it is a performance indicator and it's reported on. (Interviewee 7)

Interviewee 6 chose to comment on the importance of waste data collection and reporting for operational rather than public reporting purposes, suggesting that waste data collection is a KPA for the organisation but not for public reporting purposes:

So, all these things, it's all coming to data. You are asking about tonnage, I'm talking about data for every concept of waste management. The sole reason being; how many bins do you have in the city? How many do you want to replace? What is its life expectancy? (Interviewee 6)

The councillor echoed the sentiments of other participants by clearly indicating that improved national waste reporting is not a KPA for local councils. The councillor also argues strongly, similar to other respondents above, that waste data collection and reporting are more important from an internal transaction cost perspective than from a public reporting perspective:

No. Look I don't think it is.... because for a lot of councils, that's neither here or there. That's warm and fuzzy sort of stuff. What they're looking at – what the bean counters really want, [the] finance officers and the general managers, are to see savings and better outcomes. (Interviewee 2)

The representative of a community-based environment interest group remarked that whilst they may not be able to influence data collection and collection systems, that unlike some other participants, they do consider the national report important to reflect on waste management in Tasmania. This further reinforces the argument that communication from the federal government regarding the purpose and importance of national waste reporting should be improved:

We can't influence the collection of waste data, except maybe just to hope, in retrospect, that the data is collected in a way that shows how there's a deficit in waste management.....only by showing – by using the reports to say, 'Look at the woeful way that Tasmania collects waste and doesn't recycle. Can we have a voice in that?' (Interviewee 4)

The state government manager confirmed that national waste data reporting is important but that it is currently not formalised in official KPAs in the relevant state departments, reinforcing an earlier conclusion that political accountability should precede managerial accountability (Gains & Stoker 2009):

It's certainly an important area, and I believe it's a very important area. I believe it's one of the things that are externally judged in terms of Tasmania's recycling performance. So whether or not it's a performance indicator for me personally is a difficult question to answer..... But there's nothing written in my position that says, 'You've improved the data performance,' or 'You've increased the recycling rates.' Because we don't have that governance structure with the regional waste authorities and councils or government policy saying; 'we shall reach these targets of recycling or recovering rates or whatever they may be'. (Interviewee 8)

The manager again reflected on how he perceived the relationships between the state government and local government in supplying waste data for national reporting purposes to be relationships between partners by remarking:

What we've now been able to do is become very clear on the conversation we want to have with local government about the things we can support them on and participate in with them. So the waste data conversation is working quite well at a technical level. (Interviewee 8)

An analysis of the data reveals that only a waste service provider with a national footprint and the state government manager consider the collection of waste data and improvement of data collection systems for national reporting purposes to be a performance area of importance.

The data suggest that managers of LGAs and their service providers hold clear self-interested, TCE views (Williamson 1979, 1993, 1999) of why they collect and report internally on waste data. They attach operational importance to the improvement of waste data collection systems which can be leveraged to improve on public reporting of waste data. This finding is similar to that of earlier studies (Qian & Burritt 2009; Qian, Burritt & Monroe 2011).

From the above, it can also be argued that there is a misalignment between the federal government as the principal's waste data collection expectations for public reporting purposes on the one hand, and LGAs and their waste service providers as agents' self-interest in waste data collection on the other (Miller 2005). This detracts from developing a strong accountability relationship between principal and agent, which can only be resolved through re-negotiation and improved communication (Bigdeli, Kamal & de Cesare 2013; Brown, Potoski & Van Slyke 2006).

The accountability relationship is constrained by the lack of perceived value of national waste reporting, which can be addressed by the federal government improving communication. This can be in the form of a more relevant data feedback mechanism to allow individual councils to benchmark their performance against national averages and against those of other actors in the network (Folz 2004).

7.8 The role of a landfill-waste-disposal levy in improving waste data collection systems

Waste data in the SWSA jurisdiction is omitted, duplicated or misclassified by LGAs and their service providers (Blue Environment 2011, pp. 28,30,31, 57–60 & 71). The apparent improvement required of data collection and reporting systems in the region is constrained by a lack of resources experienced by actors in the waste network (Blue Environment 2014, p. 31; Interviewee 1 ; Interviewee 3 ; Interviewee 7 ; Interviewee 10). Blue Environment (2014 & 2011) suggests that the introduction of a regulated waste disposal levy may alleviate such resource constraints and recommended it, but cautioned that revenue generated from the

introduction of waste disposal levies may not necessarily be solely applied by the state government pursuing waste reduction and related strategic objectives.

Interview question 7 addresses the concern that high-powered incentives will not necessarily be applied to motivate agents (Jensen & Stonecash 2005) to improve waste data collection systems. These include improvement in governance of structures arising from active partnerships and collaboration as contemplated by the National Waste Policy Implementation Plan (EPHC 2010a, p. 9) and the Tasmanian Waste Strategy (Environmental Protection Authority 2009, pp. 3 & 9);

To what extent will the introduction of a waste disposal landfill levy assist you to overcome constraints in your waste data collection system?

Financial incentives designed to strengthen accountability relationships in local government networks improve the governance and functioning of such networks (Doberstein 2013a; Miller 2005). Interviewees 1 and 12 supported this view by observing that the introduction of a mandatory waste levy is desirable and that it will alleviate existing funding constraints, thus improving the waste data collection systems. The respondents qualify their opinions, with the former arguing that the introduction of such a levy should be done through stakeholder engagement to ensure buy-in from actors in the larger Tasmanian waste network and the second respondent cautioning that the levy should be substantial enough to allow for adequate funding:

Why doesn't every waste transfer station or facility have a weighbridge? Now, that's something which, if you're looking to collect data, that's-- but again, there's no money to invest in this infrastructure as far as one of the benefits that a mandated waste levy could mean, is that we've got resources to apply to getting a consistent data collection..... the state government, at the moment, doesn't actually have any flesh in the game. They don't actually provide any money to local government regarding waste management, but if they provide the regulatory framework for a mandated waste levy, andthat local government would agree, would consent to a mandated waste levy – and industry, as well, agrees with it, on the basis that it's 100% hypothecated to waste management. Now, that's a pretty big ask. No other jurisdiction does that. (Interviewee 1)

Well, there is one at regional level at the moment, and it hasn't improved data collection. It is a very small levy [but] if there was a regional or state levy that was a much higher amount, and generated significant income to go around every site and upgrade their software, or pay for a person to go around and teach people stuff – you know, this is what this waste should be, this and that, and we want you to call it this, and a six-month project, or something like that, for someone to do that – yes, I think it would improve the waste data around the region. But it would need to be significant enough to effect significant change. But it hasn't been demonstrated particularly well in the past. (Interviewee 11)

Interviewee 12 confirmed the Blue Environment (2014 & 2011) observations that LGAs are concerned about how funds will be applied that are generated from the introduction of such a levy and that the introduction of the levy *per se* will not necessarily improve the ability of regional waste networks to improve their data collection systems:

It depends on what they use it for, that's the issue with this. A landfill levy is a good idea because it gives you that working fund if you like, to do a number of different things so you look at things more closely from a regional perspective. If part of that is to actually say, 'Well okay, let's get some meaningful data that we can actually use and we'll use that meaningful data to look at things like education programs and a number of other things like that.' then I think it's useful.

Access to funding from the proceeds of such a levy will not necessarily become available to meet all the waste management strategic objectives of the federal government on an equal footing. Interviewee 9, for example, again confirmed a TCE approach with regard to constrained landfill space and argued that funding should be prioritised to meet objectives designed to alleviate short-term landfill constraints:

Yes. Yes. Absolutely – And we would certainly be putting our hand up, I think. I think all big councils would certainly be seeking to use that levy money to improve our waste diversion, particularly for us that have short-term landfill solutions, any opportunity to use that levy funding on projects that develop alternatives to disposal, we would be certainly be chasing up. I think all councils will be.

The prioritisation of funding of short-term waste disposal solutions may result in actors in the network competing for funding on an unequal footing. This is borne out by a manager

observing somewhat cynically that it may not be the most deserving projects that eventually get access to grant funding;

I wouldn't say my council or any one council should get all the money, or we shouldn't be writing grant letters and things like that. Which if it is administered that way, you won't be giving money to the best project – you are giving money to the best grant applicant.....having dealt with local government application of grants and stuff, which we kept missing out on many grants [*sic*] and we wondered why, and the reason is simple..... grant writing is a specialist art, I was told, which has apparently degrees to back it up and we have degrees for every damn thing now, but the reality is..... a noble [idea] type [*sic*] of improving waste management through a levy, kind of get compromised. (Interviewee 5)

From the above, it becomes apparent that the managers of LGAs are apprehensive whether a mandated landfill levy will generate sufficient funding, and they also question whether they will have access to such funding to improve their waste data collection systems. The managers of waste service providers mostly echo the views of LGA managers and deem it unlikely that such a levy will allow them to improve their waste data collection systems: for example:

The levy itself, I don't know whether that would improve the systems. Legislation needs to be consistent throughout the State, which it isn't at the moment..... I don't think it would affect or assist, because I don't think there'd be any monetary return relating to systems. (Interviewee 10)

Because the Landfill Levy won't – if there ever is one, which it's a bit odd that there isn't, seeing that everybody agrees that it would be a good idea – the Levy is not going to be used, as far as I'm aware, on that sort of project. It could be if somebody puts forward a project, but it's more a voluntary thing. My understanding is some of it will go to the EPA to do some of the administration of the Levy, but other than that, it will be a project-by-project basis, and it's not designed to go to any particular [name of service industry withheld], so I don't see it helping us particularly. It's more likely it would help the waste-management industry in the state overall, and that may roll down to us being asked to provide some additional information. (Interviewee 7)

A substantial portion of such a levy will be directed to strengthen the EPA's internal capacity. Interviewee 6 expanded on the observations above that the introduction of the levy may result in an increase of inappropriate disposal, especially C&D wastes, to avoid payment of the levy. The manager was of the opinion this will require increase policing:

When the levy comes that's when the policy and enforcement will happen..... The current voluntary levy does not include concrete, but when a levy comes for all waste, it can also include concrete.So in that case they have to police us vigorously to make sure people are not dodging, or not counting.

From the above, the strengthening of waste data collection systems is not considered a priority area for LGAs and their service providers. As such, the limited funding that may become available through the introduction of a mandated waste disposal levy is likely to be applied elsewhere in what they consider to be more pressing areas of importance. This interpretation is supported through the lack of reference by the councillor of a small rural LGA to aspects of data collection systems when offering examples of pressing waste management issues:

Absolutely – Yeah, we've got big problems regarding unregulated landfills. The old farm rubbish dump which was still being used and a lot of nasties [are] going into them. We've got issues with dumps of chemical drums on properties. Car tyres, which were big legacy issue[s]..... So, yes, if the resources are settled, we'll certainly gain some benefit..... One of the big challenges, particularly in rural Tasmania is that there's not a huge capacity within the community to pay any more money.
(Interviewee 2)

In contrasting the views of community leaders with those of other interviewees, the representative of a Tasmanian environmental interest group offered a more optimistic view by arguing that the introduction of the levy will display leadership in waste management by the Tasmanian state government, suggesting again that political accountability is a prerequisite to managerial accountability (Gains & Stoker 2009; Grant & Fisher 2011):

But I think that the role the government has to play there is, as I say, is to set the regulatory environment which encourages that innovation. A waste levy is a perfect way to start doing that. It is probably one of the most critical tenants now.
(Interviewee 3)

The representative of a local community group agreed with the above community leader's views on political accountability but supported the views of other participants that funding should be prioritised for operational issues rather than accountability aspects:

Federal government should now be making sure that the state governments are coming into line, and that they're all giving incentives now, and that's mostly with levies, imposing waste management levies to make sure there's incentives there for businesses who develop waste to make it part of their business to control that waste. (Interviewee 4)

The Tasmanian state manager interestingly confirmed the observations of other participants that a substantial portion of funding collected through the introduction of such a levy will be allocated to regulatory oversight bodies. The manager confirmed that funding constraints such as staff availability will be alleviated. The manager reiterated earlier views that political accountability must precede managerial accountability by commenting that WAC must consider funding models as a precursor to the introduction of the levy. The manager is of the opinion that Tasmanian LGAs are largely supportive of the introduction of a waste disposal levy:

Assuming how that money is provided and how much of it. You know one, two staff [could be employed] It would be a rare arrangement where a proportion of those funds from 10% to 50% didn't go to an EPA... the Waste Advisory Committee.... the first thing it was required to do was to put together some funding models. And you really can't do much without that. And then the rest of what it's done really has been then to try and justify why the levy is an important beast, and how that might look, and how that might be spent. Now, local government's supported that right across the board. I think of the 29 councils, 26 have supported it through their general meetings with community members. (Interviewee 8)

An analysis of the data suggests that although all participants agreed that an introduction of a waste disposal levy will benefit the Tasmanian waste management industry in general, a number of participants saw limited scope in accessing funds to benefit their organisations' waste data collection systems.

The funds generated by the introduction of such a levy would to a large extent be applied to administer and police the levy itself. The remainder is likely to be subjected to a process of

advocacy (Henry & Dietz 2012) through grant applications which would mostly benefit urban councils suffering waste disposal constraints rather than those who wish to improve their waste data collection systems or indeed rural councils.

The financial implications of regulated landfill levies for principals and agents in waste management networks are under-studied, with little guidance available from the scholarly literature (Simões & Marques 2012).

7.9 The Partnership Agreement on Communication and Consultation with the state government: The collection and public reporting of waste data

The development of new information sharing networks may result in a lack of clear responsibilities and poor communication flows (Albrecht et al. 2014; Bălan & Radu 2012; Goliday 2012; Lee, I, Feiock & Lee 2012). This study's theoretical framework suggests that in responding to policy interventions by higher levels of government, appropriate mechanisms available to LGAs should be considered (Feiock 2013). Service-level agreements, as an example of such a mechanism available to LGAs, may serve as a device to clearly identify roles and responsibilities of actors in regional waste networks, which in turn may improve communication (Moll & Hoque 2008; Reid 2012).

Per example, Kingborough Council entered into a partnership agreement with the state government, the purpose of which is to improve communication and strengthen the accountability relationship between the two levels of government (Appendix 9, para. 3).

Interview question 8 addresses the concern that the partnership agreement may not be effective in supporting waste data collection and reporting by LGAs to the state government.

Has the Partnership Agreement on Communication and Consultation with the State Government improved the collection and public reporting of waste data in your organisation?

The LGA managers surprisingly appeared largely unaware of the existence of such an agreement; for example:

Now, as far as any communication agreement with the state government, I'm completely unaware of it. (Interviewee 1)

Not really. My relationship on waste data with the state system has always been a one-by-one, except when we're developing or refining, when we come together with the regional groups. (Interviewee 9)

I couldn't tell you. I don't know. I've not done any work in that space. (Interviewee 11)

Another manager added that as a communication tool it served no purpose with regard to the communication of waste data between local and state government:

.....but the fact that I've never even heard of it before – and I think, ‘Well, it's not that great a communication tool in that case.’ And I think quite often people put it on their website as to say, ‘Yeah okay, we'll put that on there.’ and it's almost like a bit of a motherhood statement but nothing really actually happens out [*sic*] the other end. I suspect that [this] one might fit into that ball-court. I could be wrong, there could be someone here that gets a lot of value out of it but I haven't heard of it. (Interviewee 12)

In contrasting the views of the waste service provider managers, a similar response was offered by a manager who is also unfamiliar with the agreement:

I'm not familiar with that partnership agreement. (Interviewee 7)

The remaining managers chose to respond on the nature of a service agreement as an effective communication device. Interestingly, the managers showed a preference for regulation as a formal communication tool rather than service-level agreements; for example:

.....directly go to enforcement. Have a good system. Have a good permit in place and say every month you have to supply [waste data] or we will have to charge [*sic*] you. (Interviewee 6)

From a personal perspective, I think it [communication between LGAs and the state government] needs to be more formalized, and clearer, so there's a certain regulation there, if you like. (Interviewee 10)

The councillor remarked that for such an agreement to serve a meaningful purpose, the relationship must be clear and the service must be considered important, suggesting that supplying waste data is not considered important or that the roles and responsibilities for the supply of waste data by LGAs are not entirely clear:

Look – and a lot of those agreements, they capture a range of informal arrangements. But also – there are some specific roles where there is a role, such as an emergency management. Yes, look – there are some very important functions where there's a quite clear relationship between local government, [and] state government. (Interviewee 2)

The community leaders and Tasmanian state government manager did not respond to this question.

The partnership agreement on communication and consultation with the state government cannot be considered an effective communication device to clearly identify roles and responsibilities with regard to the supply of waste data by LGAs for public reporting purposes (Moll & Hoque 2008).

An analysis of the data from this interview question, as well as data from earlier responses in this chapter, would indicate that whilst the state government perceives the communication of waste data from LGAs to be based on partnership processes (Rai et al. 2012), managers of LGAs and their service providers in contrast show a preference for communication and accountability based on compliance with regulations (Bebbington & Gray 1993).

7.10 The Partnership Agreement on Communication and Consultation with the state government: Improving regional waste data collection systems

The development of new information-sharing networks may result in a lack of clear responsibilities and poor communication flows (Albrecht et al. 2014; Bălan & Radu 2012; Goliday 2012; Lee, I, Feiock & Lee 2012). The introduction of service-level agreements as a communication device to clearly identify roles and responsibilities of actors in regional waste networks may improve communication (Moll & Hoque 2008; Reid 2012).

Per example, Kingborough Council entered into a partnership agreement with the state government, the purpose of which is to improve communication and strengthen the accountability relationship between the two levels of government (Appendix 9, para. 3).

Interview question 9 addresses the concern that the partnership agreement may not be effective in support of improving waste data collection systems of agents in the SWSA jurisdiction.

Has the Partnership Agreement on Communication and Consultation with the State Government led to an improvement in regional data collection systems such as weighbridges and waste audits?

The responses from LGAs managers are varied. Earlier observations regarding a lack of political will and constrained resources are reiterated by Interviewee 1, who argues that these constraints limit the effectiveness of agreements between the state and local government:

Very few of those partnership agreement actions actually eventuate. Because when it came down to the individual – for instance, in our case there was an undertaking that the state government would support a public safety committee being formed in my municipal area, and it never happened because the local police district simply didn't have the resources to do it.....unless people can see a purpose for it, how's this actually going to help us and what's it going to do? But the current government has really moved away from these partnership agreements. I haven't heard anything about them being reviewed or refreshed.

There must be a very specific purpose or reason for such an agreement. Interviewee 9 sees a specific future use for the agreement in the ambit of developing an IT systems approach to waste data collection. Data collection should be systems-driven according to Interviewee 9, who remarked that the agreement may have some future application in support of developing data collection systems:

So somehow, we have an agreement both at a state and federal level about where that data can be mined. It's placed into a system and it's mined, and however you wish to mine it, you mine it, but we don't have to do anything from our end; it's in agreed form as we put it into the system.

Interestingly, Interviewee 5 chose to comment on the lack of cooperation between the 12 councils in the SWSA jurisdiction as a factor limiting communication and consultation. The manager perceives the lack of cooperation as a far more important issue than the effectiveness of the service-level agreement. This observation supports findings from other studies that policy makers underestimate the extent of competition between LGAs, even in the same jurisdictions (Lee, I, Feiock & Lee 2012; Minkoff 2013), which often negates the benefits intended by the drafting of regional agreements:

I wouldn't say communication or consultation is compromised [by the lack of an effective agreement], it's more like [constrained by a] lack of cooperation between the twelve Councils and what they want to do together.

In contrasting the observations of the LGA managers with the managers of their service providers, Interviewee 7 observed that an agreement or similar communication protocol between waste service providers and the state government may potentially improve communication with regard to the improvement of data collection systems:

We do have trouble communicating with the EPA... So from that point of view, I would like to see a protocol so that we can get some two-way communication happening, because at the moment, it's a black hole.

The councillor observed that the service-level agreements outlined LGAs' obligations in general terms, without funding provided by the state government to support these obligations. This observation supports earlier findings that the incentives and guidance of higher levels designed to improve communication are inadequate:

The big problem was that partnership agreements were full of stuff local government was expected to provide, but there is nothing on the state government side of the ledger. What we've said is, look, we want some dollars in those columns because we'll provide that if you can help us provide it. They're looking at getting something for nothing.

The senior state government manager and community leaders did not respond to the question.

While the existing partnership agreement has not improved data collection systems, a few participants pointed out that it may have some future communicative benefit to strengthen accountability relationships (Rai et al. 2012). In contrasting the responses to interview questions 8 and 9, participants prefer a regulatory communicative model (Bebbington & Gray 1993) with regard to the supply of waste data for national reporting purposes. Service-level agreements may have a limited role to play in bolstering communication with regard to the improvement of especially IT driven waste data collection systems.

7.11 The role of contract management and monitoring in the collection of waste data

The Australian federal government expects state governments to be accountable for the improvement of waste data (EPHC 2010a, p. 19). The federal government suggests that the state governments discharge their accountability obligations by engaging in outsourcing initiatives such as ‘multi-agency management arrangements’ and ‘active partnerships’ (EPHC 2010a, p. 9).

Such management arrangements and partnerships necessarily entail the drafting of contracts. Contracts entered into by the actors in the SWSA jurisdiction are of a longer-term nature, especially with waste disposal agreements favoured to be 20 years (Appendix 10, para. 6 & 7). Collection of accurate waste data requires weighbridges and waste audits, and with these techniques being expensive, if the contract does not allow for regular renegotiation, it may not be possible to negotiate contract amendments to facilitate new and improved data collection techniques (Ball, Broadbent & Jarvis 2006).

Question 10 addresses the concern that the accountability expectation of the federal government for more and improved waste data is constrained by inadequate monitoring and management of contracts between LGAs and their service providers:

In contrasting external contracts for kerbside waste collection and waste recycling with those of waste disposal to landfill, what are the major constraints with regard to managing and monitoring the collection of waste data in terms of the contracted requirements?

Only one manager specifically answered the question by admitting that the contractual stipulation for waste data is lacking in current contracts and that the LGA is constrained by the length of the contract:

If I look at our waste contracts, I think that's got some stuff in there that just shouldn't be in there and stuff that should be in there, that's not in there so it's got it's issues but it's tied up with another –it'll be another two or three years before the opportunity exists to change that again..... There's no clause in there about waste data whatsoever. There's other stuff about the type of machinery and things like that but nothing about the actual waste data. (Interviewee 12)

The LGA managers are mostly concerned with contract management and monitoring issues that may impact indirectly rather than directly on the demand for waste data; for example, strategic managerial issues related to TCE issues (Williamson 1976, 1979, 1981, 1987, 1993,

1999) and trust in reputable suppliers (Brown, Potoski & Van Slyke 2007; Das & Teng 2001; Lamothe, M & Lamothe 2012) are raised by LGA managers;

There's also the issue of strategic approaches to these issues. The councils that are relatively wealthy and produce quite larger volumes of waste really dominate the market, in the sense that any other recycler or any other contractor, in order for them to be viable, they really need a couple of those big contracts. (Interviewee 1)

The first issue would be depending on the contract with [name withheld] in terms of whether or not they have differential pricing for various waste types. If they had a single price for all waste, then everything's dependent upon us to classify [wastes] at our waste transfer station. (Interviewee 9)

Yeah exactly, we can [demand waste data] and it's in terms of the contract. Mind you, like with a good contract, sometimes it's hard as [a] contract may be perfectly fine but you might end up with a very bad contractor. But then you get a very good contractor who has all the good systems, and say for a company like [name withheld]and they have their reputation, and so they have good systems..... we never had any issues getting data. (Interviewee 5)

I suppose it also comes back to your contract management and type of contractors you actually get as well. So for example, you can get good contractors and bad contractors. Now you can write in your contract that you're required to actually get all this data back or whatever, but then you've got to enforce it and that can be hard sometimes because bearing in mind, a lot of contracts – whether you like it or not – tend to be heavily swayed towards price as well. (Interviewee 12)

No manager specifically differentiated between different types of waste contracts having different monitoring and management requirements and capacity constraints to monitoring, and management of contracts is not considered a major issue by managers: for example:

So look, to me it is all in how you write your contracts, and how well your contracts are reviewed by councillors, or if you're using a consultant to write your contract, how good their knowledge is and how much they much they know [what] your requirements are for reporting. I honestly think it's as simple as if it's written in the contract that the contractor needs to report back to Council in this manner, in this frequency, in this type, in this format, then that should be job done.....we spell out the

reporting requirements very clearly in there, and it's quite a decent section in most of our contracts about reporting requirements, either to us or to other organisations - usually back to us.....we have a contracts unit.....if they [other LGAs] don't have their in-house unit or experience.....there are plenty of people out there that will superintend contracts for you and manage contracts for you. (Interviewee 11)

In accordance with the outsourcing management literature discussed earlier in this thesis, the managers of waste service providers are in agreement that a strong written contract with clear stipulations regarding the demand for waste data is essential for proper monitoring and management of those demands (Das & Teng 2001; Kakabadse & Kakabadse 2003; Lacity, Hirschheim & Willcocks 1994; Vagadia 2012); for example:

So it is the duty of the local government when they give out contracts to make sure that they got [*sic*] to report You've got to give the monthly tonnage by the first ten days of the month – very crystal clear. Again, yes we will have lapses here and there but that's all – like very minimal. And look, when selecting the contract, you've got to do a little bit of homework. (Interviewee 6)

And that's where the councils have to be careful with the way they word their contracts, so they've got to get the data and also potentially and preferably have the right to go and audit the data so that they know that it's correct. So you've got the two arms. You've got to be able to get the data and be satisfied as to its quality. (Interviewee 7)

We can adequately service, and probably have the capability to service beyond requirement..... We would've taken into account when we were tendering for that process – the requirements of data collection. So there's a cost, but we could adequately provide what they want.....and they probably need to be a little bit more specific in their contracts with what the requirement is for data provision..... It all depends on the ability of the transfer station to segregate waste. If the waste segregation is done properly then our systems can pick it up okay.....and [then] there's probably no need for a weighbridge per se there. But it all goes back to the written document then as well. (Interviewee 10)

Small and rural LGAs may be affected by internal resource constraints, resulting in outsourcing initiatives, with small contractors not always able to supply waste data for

national reporting purposes (Bel & Fageda 2011; Qian, Burritt & Monroe 2011). The councillor of a small rural council confirmed that they engage in outsourcing practices. The councillor also makes reference to the limited availability of a contractor, suggesting this constrains the council to supply adequate waste data

We are a small council. [Contractor name withheld] works two days a week..... part of his responsibility is to record that information.....We get our information from [name withheld] because all of our waste going to landfill, goes to [name withheld]. (Interviewee 2).

Further support for the findings of the above studies can be found in the councillor's arguing that cost constraints in small and rural councils' impact on the quality of waste data:

What it costs – and this is another huge issue. Each year it's just becoming more and more expensive.....we know exactly how much goes to landfill. As far as recycling, we don't know how much is recycled, because our contractor can't even give away what he gets out of the kerbside collection..... And the reason we went to [landfill name withheld] was actually because they cut their price. So we go there, not because we think they're particularly good, but because it's more efficient. We'll take the cheapest one we can get..... And if we required that level of data collection from our small country contractor, basically he couldn't afford it. (Interviewee 2)

The representative of a Tasmanian environmental group took issue with the strategic aspects of LGAs contracting for waste disposal, which may impact on the supply of waste data as LGAs are locked into long-term waste-to-landfill contracts, but at the same time not wishing to report on their resulting poor recycling performance

For council to 'make money' from the endpoint of waste disposal necessarily implies a landfill outcome as it is the only endpoint outcome for waste that [so] they can afford the capital infrastructure and potentially make a margin from [sic]. More advanced waste management options require capital investment from medium to large corporates who in turn need to be able to guarantee supply of waste volumes from MSW which are currently locked into landfill contracts with a council owned operation. In effect they are monopolising the market leading to the very poor overall outcomes for waste recovery in Tasmania. (Interviewee 3)

The representative of the community-based environmental group echoed these observations by arguing that commercial intent is an impediment to environmental accountability (Hukkinen 1995) and may well lead to a lack of transparency (Barton 2006) in waste contracts LGAs enter into:

I can't see anything really that if it impacts on community through local government that shouldn't be open. I can understand within a small community – especially with controlled waste reporting..... I can't really see why there should be any ambiguity or any commercial in confidence, really.... that's as far as I'm concerned – yeah, they shouldn't have a profit motive, because I think then the profit motive becomes at all costs [*sic*], so then you get sort of shady business deals. (Interviewee 4)

The Tasmanian senior government manager pointed out that contracting out waste disposal in contrast to in-house solutions creates a cost burden for LGAs. He argued that future solutions should be based on an integrated regional cost and service delivery perspective. This cost-driven approach may well impact on future amalgamations and consolidations of LGAs and their areas of responsibility:

Cost of disposal – because a lot of these councils ran their own landfills for nothing, so they didn't have a disposal problem. And all of sudden, they're paying to [names withheld] or wherever else, and it's chewing into 2% to 3% to 4% to 5% of their budget.... So they started to see a financial end cost that they hadn't seen before when they had their own little landfills..... And so, okay, what's the governance structure, what's the infrastructure that we need, do we build a transfer station at [names withheld] or at wherever. Not because of a boundary, but because of a time frame for service delivery that we think that every resident has the right to be within 15 minutes of a transfer station. And then it doesn't matter where it's built..... It has to be where it makes sense economically and technically. That's what's not happening in waste. (Interviewee 8)

LGA managers and their service providers first and foremost consider a combined approach of selecting reputable suppliers and having strong written contracts to be essential for demanding high-quality waste data (Brown, Potoski & Van Slyke 2007; Dekker, Sakaguchi & Kawai 2013). The observations of Interviewee 11 suggest that it may not always be possible to negotiate contract amendments to facilitate new and improved data collection

techniques as expected by the federal government, confirming the findings of the earlier study (Ball, Broadbent & Jarvis 2006).

Strong cost considerations are apparent from the data, thus supporting the notion that self-interested TCE principles play a major part in decision making in the SWSA waste management network, which may impact negatively in demanding high-quality waste data (Hart & Moore 1999; Miller 2005)s. Interviewee 3 implies that that the commercial approach to contracting of waste disposal may be an impediment to reporting on recycling rates in the region due to underperformance against national averages (Hukkinen 1995), whilst the response from Interviewee 4 supports the findings of other studies that argue that the principles of accountability and transparency in public sector contracting should always be favoured against claims of confidentiality (Andon 2012; Ball 2012; Barton 2006; Brown 2013; Kluvers & Tippet 2010; Purse 2009; Quiggin 1996; Shaoul, Stafford & Stapleton 2012).

7.12 The role of regional networks in improving waste data collection systems

The STCA, a regional network with a historical membership identical to that of the SWSA,²⁷ provides a range of facilitation services to its member councils. With the LGAT, which represents a number of councils across Tasmania, also taking a number of policy positions on aspects regarding waste management practices on behalf of its members, the concern is expressed that these policy positions amongst the various networks appear to overlap and are in some instances conflicted (Blue Environment 2011, pp. 2, 9 & 12).

Collaboration through inter-local outsourcing and outsourcing to network governance structures is available to LGAs to respond to policy interventions from higher levels of government (Carr & Hawkins 2013; Hilvert & Swindell 2013; LeRoux, Brandenburger & Pandey 2010). Collaborative outsourcing practices appear to satisfy the waste public policy prescripts of establishment of ‘multi-agency management arrangements’ and ‘active partnerships’ between governments (EPHC 2010a, p. 9). Interview question 11 addresses the concern that these outsourcing practices by LGAs have not improved on waste data collection and collection systems, thus negating the accountability expectations of the federal government.

²⁷ Hobart City Council resigned its membership in the SWSA effective from 30 June 2014 (Alderman Damon Thomas 2014).

Have or will (your perception) your organisations' involvement with the SWSA, SWS, STCA and LGAT regional networks result in improved waste data collection systems?

The various managers offered mixed views on whether individually the various regional bodies have indeed improved their waste data collection and collection systems. Individual actors only engage in collective action (Feiock 2013) if the benefits of such engagement exceed the transaction costs (Delabbio & Zeemering 2013; Williamson 1979, 1981, 1993, 1999). For example, Interviewee 9 explained that Hobart City Council resigned from the SWSA due to a perception that they were not receiving adequate value for their voluntary levy contribution:

From what I know that between the Hobart – and Glenorchy City Councils' they were paying almost 45% of the levy and yet received two twelfths of the service. And so there was a general feeling that – so there was a sense within the [Hobart City] Council that – there was a frustration that the SWSA was not providing the level of service that the funds justify.

The perceived lack of service provided by the SWSA in the past is echoed by Interviewee 12, who explained that the SWSA had limited impact on the improvement of waste data collection systems due to a lack of political support and resource constraints;

Look, they've done a little bit. They haven't done what you would want them to possibly do but, if you haven't had a drive for waste being pushed down externally from someone else, then typically that's what will actually happen – it was only a couple of people effectively at SWSA that's all it was. there's not a drive for actually doing any of this sort of stuff from a waste perspective. And usually a drive will come down from either being mandated from a legislative point of view, or it's a dollar driven thing and at the moment neither of those is in place. (Interviewee 12)

In considering the STCA as an alternative vehicle to the SWSA to facilitate the improvement of regional waste data collection systems, the former may provide better political representation and improve the advocacy positions of some councils with the state government. The STCA may suffer from a similar lack of resources and expertise constraints and may not necessarily improve waste data collection and data collection systems; for example:

I think the theory would be that STCA is a bigger organisation. It's got a higher profile – most people have heard of it – and it probably is better resourced staffing wise, and it probably has a much better connection with the Lord Mayors and the councillors themselves than the SWSA. So I think from that point of view, it may get more traction, butwhether it will have the ability to just focus on waste might be the risk, whereas the current organisation should-- that's all they exist for, is to do waste stuff.....whereas the STCA does a lot of different things. I would imagine it would be better resourced and better placed to deal with it, if it had the expertise in that area and the want to do it. I don't think that's probably the best place for it anyway. (Interviewee 11)

From the above, LGA managers appear to be very aware of their surrounding political power structures and which of these structures best represents their constituencies' interests at higher levels of government (Keast, Mandell & Brown 2006). The above observation that preference for STCA as an alternative to the SWSA may be based solely on the fact that advocacy positions on regional waste policies of some actors in the network may improve is supported by a senior manager remarking:

STCA wants to take hold of waste – but again that's a political thing. STCA is just the mayors which run it [*sic*], it's a political thing. (Interviewee 5)

Some LGA managers argue that the consolidation of landfill services under the banner of SWS is advisable and should improve waste data collection systems due to an improved scale of economics resulting from such inter-local contracting (Bel & Fageda 2011); for example:

I think it does because it's like anything, you've got one organization [SWS] so it only gets funnelled through one organization and it's easier to get all that data, it's easier for EPA or whoever it happens to be, to actually collect that data and it's easy to make sure you get consistency. (Interviewee 12)

Yes. I mean, well it has to, it will be the only landfill, so it'll only be one site, the EPA will have only one operator to deal with. (Interviewee 11)

In considering a possible role the LGAT can play to improve waste data collection systems in a larger regional context, a manager remarked rather scathingly that the LGAT has not contributed meaningfully to the improvement of waste data collection and collection systems:

No. Yeah, look, it just perhaps adds more noise, and not meaningful noise, because the regional waste groups have really had to drag the Local Government Association of Tasmania, kicking and screaming, to do anything regarding [*sic*] trying to prosecute our case for reforming regional waste arrangements. (Interviewee 1)

In contrast, it is argued that the LGAT has played a limited role in the past, for example, to assist with procurement of waste assets which could be extended to data collection tools in future:

LGAT just helps us in procurement of things and stuff like that. And they do give some good assistance when you are buying things... they have contracts in place to buy trucks or whatever it is – waste items. But they could include software, which could be valuable. (Interviewee 5)

In contrasting the responses of the managers of waste service providers, two general managers offered an opinion on the involvement of the SWSA, with the former commenting that it has improved regional waste data collection systems marginally, whilst the latter felt strongly that it did not:

I'd say that [SWSA] has improved it marginally. I wouldn't say there have been huge improvements and I wouldn't say there's been a huge drive to improve it, but it definitely has moved forward over the last ten years. (Interviewee 10)

No. And in fact, trying to find out the data is like getting blood out of a stone. I think the Southern Waste Strategy Authority might be about to be abolished. (Interviewee 7)

No opinion on whether the STCA and LGAT have improved waste data collection was offered by any manager of waste service providers. Interviewee 10 indicated that SWS may in future improve data collection due to the increased availability of weighbridges but hastened to add that such improvement may not eventuate if individual council systems are not integrated and automated:

It [the involvement of SWS] would make it easier through weighbridge systems, that type of thing, should assist in the tracking. As long as everybody actually fills in their data – a lot of it is still very much paperwork.

The councillor did not offer a relevant response. The representative of the Tasmanian environmental interest groups remarked that the involvement of the regional structures did not improve the quality of waste data they are interested in; for example:

When we go to each council and say, 'Can you please provide data on actually how much hazardous waste is generated within your municipality?' We get basically a response of, 'We don't know, we don't have collection or we produce basically none.'
(Interviewee 3)

The representative of the localised environmental interest group complained that the data they require are outdated and that operations of the regional bodies are constrained by the expertise of board members. Earlier concerns that corporatisation and the commercial intent of some of the regional structures are impediments to reducing waste disposal to landfill (Hukkinen 1995) were repeated:

There are the people that are on board of [name withheld] and on the board for other.....on other panels. Their expertise is probably likewise – perhaps ten years old, and they haven't kept up what's happening overseas or in other states, and still are maintaining the same information that is landfill is viable..... the profit motive in the end drives, so I think that structure should not – I think the corporate structure doesn't, I really I don't think it works. (Interviewee 4)

In contrasting the roles of SWSA and STCA, Interviewee 3 argued that the STCA is politically driven to advocate for a centralised landfill agenda which, in line with the concerns expressed in the responses to earlier interview questions, may detract from improved data collection and public reporting:

SWSA at least appears to create a modicum of independence in their role as an authority. I think if the Southern Tasmanian Council Association was to take over that role – I think basically that is a political move to lock in Copping [a southern joint LGA regional landfill facility aka SWS] for basically all southern councils.

The state manager is of the strong view that the SWSA did improve waste data collection and collection systems and positively remarked on their involvement with establishing recycling rates and waste classification systems:

Yes. Particularly early on, they modelled quite well what was in the bin, the amount of waste that was in the bin. So they got right down to the micro level of what was happening at an individual council-by-council level. They were heavily involved in participation rates for recycling. So, yes, they certainly did improve data collection.....with this being the state-wide system, essentially the SWSA created probably 80% to 90% of the classifications. (Interviewee 8)

In comparing the various landfill facilities, the manager believes that the reporting of waste data from some facilities is better than others. The earlier theme of communication as an essential element of improved accountability (Christ & Burritt 2013; Reid 2012; Wüllenweber et al. 2008) is apparent from the manager's response, which implies that it cannot be assumed that waste data collection and collection systems will automatically be improved by centralising landfill facilities under the banner of the SWS:

So [name withheld] is at the forefront of data collection. And [name withheld] have been very good. [Name withheld] has taken while to come on board. So I would say it's an easier conversation. I'm not sure it would necessarily be a better conversation.

An analysis of the data suggests that the SWSA, STCA, SWS and LGAT as voluntary regional authorities partially satisfied the Australian federal government's expectation that 'multi-agency management arrangements' can improve waste data collections and collection systems (EPHC 2010a, p. 9).

The data support the findings in Chapter 6 that tensions between actors in the regional waste management networks exist, which increase the risk of defection from these structures and has in fact resulted in the defection of actors from these networks as the result of different policy positions, for example, STCA on landfill (Lester & Reckhow 2013). The actors in the network appear to align themselves with the regional authority best suited to advocate for their constituency's immediate needs (Keast, Mandell & Brown 2006).

The data support findings from studies that found that political reasons do play a role in LGAs' outsourcing decisions (Ball, Broadbent & Moore 2002; Bel & Fageda 2007, 2009, 2010; Bisman 2008; Hefetz, Warner & Vigoda-Gadot 2012; Kloot & Martin 2002, 2007; Kluvers & Tippet 2010; Warner & Hefetz 2012).

The preference to engage with or disengage from the different waste networks is a consequence of immediate political and other transaction costs experienced by the self-

interested agents in the larger SWSA jurisdiction (Feiock 2013). The data support the ICA framework's contention that natural response preferences, largely based on agency theory and TCE, will be to reduce these transaction costs. If the self-interested costs relating to, for example, community dissatisfaction with regional waste disposal networks are higher than the costs of meeting the federal government's expectations that waste data collection systems be improved by regional network governance structures, these systems will not be improved by establishment of 'multi-agency management arrangements' and 'active partnerships' between governments (EPHC 2010a, p. 9).

As a mechanism to improve future data collection systems (Feiock 2013), the data suggest that SWS as a single regional landfill authority may indeed improve waste data collection if communicative shortcomings (Goliday 2012; Wüllenweber et al. 2008) and system constraints can be overcome (Bigdeli, Kamal & de Cesare 2013) and if transparency concerns of environmental groups can be addressed (Barton 2006).

7.13 The formalisation of regional relationships to improve the supply of waste data for national reporting purposes

LGAs contemplate a spectrum of involvement with the various regional agencies in the SWSA jurisdiction (Appendix 11, para. 1–10). Different levels of participation may result in tensions between networks and actors within a network (Bertelli & Smith 2010; Carr & Hawkins 2013).

The natural response of LGAs in aligning with the various networks is to limit agency and related transaction costs resulting from policy interventions from higher-order governments (Feiock 2013). Question 12, firstly, addresses the concern that these tensions may impact on the accountability relationships between these agencies and higher levels of government, which may negatively impact on LGAs ability to supply waste data and improve waste data collections systems, and, secondly, seeks ways to illicit suggestions for possible improvements in regional relationships.

How can the monitoring and managing of regional relationships regarding the supply of waste data for the purposes of national reporting be formalised and improved?

Barton (2006) suggests that an essential element of an accountability relationship is the acceptance of responsibility by the agent to account to a principal. In the same vein, principals must take responsibility for guiding and sanctioning agents (Lindberg 2013; Millar 2013; Sanger 2008).

LGA managers chose to respond to the question by either apportioning blame or by offering suggestions for improvements. In comparing three LGA managers' responses, the blame for a lack of acceptance of responsibility is apportioned in different degrees to various principals and agents. The first manager argued that the lack of political guidance is the key factor constraining the improvement of regional waste data collection and data collection systems. This view is supported by a second manager, who intimated that waste management is not high on the state government's agenda but hastened to add that local councillors, as both principal and agent in different accountability relationships, are also partly to blame for a lack of interest in waste data and data collection systems. According to a third manager, the lack of acceptance of responsibility to account for national waste data is primarily a consequence of LGAs themselves not taking responsibility for the shortcomings of the existing regional structures:

.....revisit what the expectations of the state government would be of the regional waste groups. At the moment, we don't have any ideas what their expectations are. The agreement, formalising regional waste groups, is about two pages long. All it says is that local government will form and support regional waste groups..... Or they might say, we'll only have one waste group for all of Tasmania, but one of the key functions in that organisation will be to provide this data.....and as I've identified, it is a huge weakness. (Interviewee 1)

Some [councillors] have an interest, some don't have an interest, so your communication has to be completely different to each of those and I don't think that works. You're better off actually saying, "Well, we've got someone like a SWSA and LGAT and waste on our agenda and therefore these are the things we're pushing and we're dealing with the state government on these issues and they're providing some feedback on some other stuff." And then they filter all that stuff down to all their various different council bodies that are actually a part of it, that's a better way of doing it. But I think until waste – if it does – ever [*sic*] get some teeth, then that's

going to be hard I think because I don't think even on the local agenda, it's not that high – so it's not rated very high. (Interviewee 12)

I don't think the concept of regional waste management and regional waste authorities should be defined by what the SWSA has become. I think the need for regional solutions in waste still exist; it's just the councils themselves need to take responsibility for failing. And it's failure; it's nothing less than failure.....So what's happened is; the Southern Waste Strategy Authority's ability to deliver has been hampered by its governance structure and the people it sought to employ in terms of delivering waste solutions. (Interviewee 9)

From the above, multiple agents and principals in the SWSA jurisdiction do not accept responsibility to account for national waste data or indeed improve waste data collection systems which impact negatively on the accountability expectations of the federal government (Doberstein 2013a). Communication between the state government and actors in the SWSA jurisdiction with regard to the supply of waste data is perceived to be inadequate (Reid 2012). Communication between agents responsible for the supply of waste data is similarly constrained (Goliday 2012).

In considering possible solutions offered by three LGA managers to improve the collection of waste data and data collection systems, the first manager considered all the regional structures to be able to adequately represent the various communities' interests. The manager hinted at the self-interested behaviour of individual actors and groups of actors as the factor most constraining the effective functioning of a regional waste management network. The second manager observed that what is important is improvement of waste data collection for internal and regulatory compliance purposes rather than how regional relationships can be best managed, suggesting a stronger regulatory approach being required rather than strengthening voluntary collective structures. In a similar vein, the third manager suggested that waste data collection systems should rather be run by a department of the Tasmanian EPA by increasing the existing staff complement and removing funding constraints:

SWSA has had a similar sort of structure [than the STCA]. STCA has a few things they've done then but you can't look at STCA and say, 'They're the shining light of Tasmania.' and therefore just by having that structure all of a sudden everything's going to be important and it'll actually happen, I don't really believe that. I think maybe that's [name withheld] view-point, I don't think that's the case. Having said that,

from a southern point of view, there's no-one else who really represents southern Tasmania and ideally it's probably better for everything to go to one authority rather than not at all..... LGAT is a little bit different because they represent all of Tasmania as compared to just southern Tasmania..... There is a feeling of this north and south sort of divide, but there's no reason why you can't have a regional body that looks at both of those areas. Now you could have a regional body and then you could have some sub-groups that are underneath [it] like a northern sub-group..... So yeah, you could run it through LGAT as well. (Interviewee 12)

Irrespective of the [regional waste governance structure], waste data still has to be recorded. So whether it is with SWSA or becomes some other ABCD or STCA won't make a difference to what we are doing now – we still have to report to the EPA. But we have to record more precisely for our own interest [*sic*] because we are eight years, seven years now away from running out of landfill space. (Interviewee 5)

I can think of a much better place for it [waste data collection] is with the state government, or an arm under the EPA.....spent the rest on waste stuff, plus enforcement and regulation. I think that would be a much better model, and that a state based model everyone paid – you know, every ton of waste was charged at 20 bucks a ton, or whatever, and it went into that fund, and there was ten million bucks across the state. Which would fund a decent – enough money for an office in the EPA with four staff, something like that, and to roll out five million bucks worth of projects a year. (Interviewee 11)

The data support the findings of similar studies that observed that network governance systems are constrained by complex communicative interactions between actors in such networks, which in turn impacts negatively on accountability (Goliday 2012; Millar 2013). A preference is shown for stronger regulation as the most appropriate communicative tool to align the federal government's accountability expectations with the collective action of agents in the SWSA jurisdiction (Christ & Burritt 2013; Reid 2012).

In contrasting the responses of the managers of two waste service providers, the former cautioned that the number of actors in the waste network should be kept at the bare minimum, supporting the above suggestion that there is a limited need for a regional authority, thus advocating for an integrated systems approach between LGA waste service providers and the state and federal governments to improve waste data collection and public reporting. The

latter argued that LGAs should be removed from the waste management network. This would suggest that waste services should be outsourced to private enterprise from a regional authority, which process should be overseen by the state government, thereby improving the scale of economics:

You need to be careful. More isn't better in lots of cases, and less can be best, if you like. The more entities you have to deal with, the bigger the task is. The risk you run of data being corrupted, if you like, through a process if you're going through different – or more entities with different processes. So if you can shrink that back to three – you've got local, State, and national – it can only be better. If you had State and national, it'd be even better still. But the more times you have to go to the well or the void the bigger the issue. I think that's where they were going with the waste tracking system, was to make it the one-stop-shop, if you like, that would have all the data. And that would be probably the best model. (Interviewee 10)

Just remove all the waste management activities from the council – there you go. Have one set of common trucks, contract it out, and you will get the best price, [with] everything [being] uniform. State government appoints an authority and if that runs the waste it'll get [*sic*] at least [a] \$10 million profit.

The observations above lend empirical support for the suggestions by Reid (2012) that effective governance structures at the community level require ongoing communication between the various spheres of government, with empowering statutes for LGAs that avoid duplication and unnecessary transaction costs.

The three community leaders chose to reflect on service delivery, transaction costs and how the self-interested behaviour of agents detracts from achieving desirable community outcomes. In comparing the responses of the three community leaders, the councillor argued that future programs to improve waste data collection and data collection systems will be conducted through a regional agency to the extent that it facilitates the saving of transaction costs for LGAs and the state government, whilst the representative of a Tasmanian environmental interest group advocated for stronger regulation rather than relying on regional waste agencies. The representative argued for stronger state government leadership due to the perception that members of regional agencies have vested interests in commercial waste activities. The representative of a localised environmental interest group shared the opinion

of other participants that alignment with regional agencies is largely driven by advocacy considerations:

I think the days of one program just for one local government area are over. Very difficult to get funds just for unilateral projects, so co-operative measures where we partner with industry, community organizations and the local government build a lot [sic] stronger funding propositions. And that's how I'd certainly like to see it done..... And a big one would be if it could say - we could negotiate contracts on a regional basis which would deliver savings and better service for the area. That's what would sell it, simple as that. Whereas, simply for the sake of saying 'we'll put this structure [sic]' – those clear benefits need to be there. (Interviewee 2)

Southern Tasmanian Council Authority – by virtue of the fact that a quarter of its members are owners of the landfill – It's in their vested interest to promote for the landfill. Why they feel they need a C cell? Well, from a council perspective, they don't. That's a problem for industry..... at the end of the day when you're talking about bulk industrial volumes of waste.....which should be overseen by state government regulation, not at the whims of a particular council or collective of councils. (Interviewee 3)

There is a hierarchy between the representatives of different LGAs within the south, that's the only part that I know – that some council representatives.....on the STCA have much more say, much more strength and much more power than some of the other representatives, and what they say is always going to be the thing that is taken up..... It's that thing about the person with the most powerful voice in the meeting is the one that is going to persuade the rest of the meeting what happens, and that apparently is what happens.....there are a few advisers [to the STCA] that are determined what they've advised is right, which is a bit of a worry as far as we're concerned, because their advice is landfill. (Interviewee 4)

The above observations provide additional support for the argument that the alignment with networks, such as the SWSA, is a mechanism used by LGAs to respond to the national and state policy interventions but that TCE and resource-based considerations related to service delivery are the primary response drivers when deciding on the extent of alignment with networks such as the SWS and STCA.

The state government manager considered this area of concern to be of high importance by responding comprehensively (Appendix 12). The manager reflected on Tasmania's being a relatively small jurisdiction as compared with the other Australian states. The manager echoed the views of Interviewee 12 that waste management is low on the list of priorities of public managers in Tasmania:

I think in the [timeline withheld] years that I've been involved in this, if I've got a single, consistent criticism, it's that people who have been working in waste management are too low down on the decision-making tree to effectively participate in making decisions about waste management at a point where it matters or it influences significant decision makers. And this is because we are a small jurisdiction, and so most of the senior environmental decision makers are generalists. Whereas, a bigger jurisdiction, we would have a Director-General of Waste Recovery and a Director-General of Waste Policy.....my experience in local government was waste sat way below wastewater and water in the hierarchy of importance, and below the roads and a few other things.

In support of the observations of Interviewee 4, the manager argued that the ability to advocate at a ministerial level is important when deciding on an appropriate governance model to improve waste data collection systems. The manager also argued that prioritising waste management is a critical consideration in deciding on an appropriate governance structure:

So by the SWSA being consumed into the STCA, I think you'll find that the risk is that the north and the northwest could push forward more easily and flexibly than the south because the south are looking at other issues as well within their regional authority.....It's almost like the regional authorities themselves have said to the LGAT, "You have a limited role. Only in areas where we do not have a role should you be there." This makes it complex for the LGAT when the person that the staffs there are accountable to seek answers to things [*sic*]. It makes it complex. But the other thing too is; who talks to the state at a senior ministerial level? Is it the regional waste authorities via the Waste Advisory Committee? Or is it the LGAT via the GMC [general management committee] and the President?

The manager reiterated earlier support for a partnership approach to govern 'multi-agency management arrangements' as suggested by the National Waste Policy Implementation Plan

(EPHC 2010a, p. 9). The manager again suggested that stronger legislative guidance regarding the introduction of a waste levy should be a prerequisite to developing governance structures aimed at improving regional waste data collection systems:

So there's a strong spirit of cooperation amongst the regional waste authorities, the state government via the EPA and the department of State Growth to keep the Waste Advisory Committee in place if the government was to ever bring in a levy. I imagine they would take that role of governance of the system. Any levy coming in would require significant legislative reform, significant in terms of waste [legislation], not in terms of total Tasmanian government legislation. (Interviewee 8)

An analysis of the data suggests that improved guidance from the state government, stronger political will and improved regulation is more important to improve accountability for waste data than choosing between existing agencies to govern data collection systems (Brown, Potoski & Van Slyke 2006; Feiock 2013; Godfrey, Scott & Trois 2013; Heinrich, Lynn & Milward 2010; Lamothe, S, Lamothe & Feiock 2008).

The data also suggest that collaboration between councils may be impeded by self-interested service delivery considerations, related transaction cost considerations and the competition between councils and representative agencies to advocate on self-interested waste matters to politicians (Henry & Dietz 2012; Minkoff 2013).

Enhancing communication between actors in the various waste management networks, between the various networks and between networks and the state government is more important in meeting the accountability expectations of the federal government than the mere choice of a specific network governance structure (Bigdeli, Kamal & de Cesare 2013; Millar 2013; Reid 2012).

7.14 Summary

Responses to a number of interview questions developed from an analysis of the corporate plans of LGAs in the SWSA waste management network in Chapters 5 and 6 are reported. The responses of participants addressed the following concerns:

Public managers are uncertain of their role related to the collection of national waste data and 'supporting' or improving the regional waste data collection systems.

Guidance by the Tasmanian government to clarify these roles is not adequate.

The lack of sanction of non-compliance with waste regulations by the Tasmanian government negatively impacts on agencies' willingness to supply waste data.

The absence of clear guidance negatively impacts on the accountability relationship between the Tasmanian state government and LGAs and their service providers.

Actors in the network do not consider the demand for waste data or improvement of data collection systems to be important, urgent or their responsibility.

The introduction of a regulated waste disposal levy will not incentivise actors to improve their waste data collection systems.

The partnership agreement on communication and consultation is not effective in supporting and improving waste data collection and reporting systems.

The collection and supply of waste data is constrained by inadequate monitoring and management of contracts between LGAs and their service providers.

Tensions between agencies negatively impact on LGAs' ability to supply waste data and improve waste data collections systems.

A discussion of the findings is presented in the following chapter.

Chapter 8: Discussion

8.1 Introduction

This chapter consolidates the findings of the textual analysis of the corporate documents in Chapters 5 and 6 with the responses of interviewees in Chapter 7.

8.2 Discussion

8.2.1 Accountability expectations of the federal government

The minimum duty of accountability is complying with legislation and regulation (Bebbington & Gray 1993). The expectations of the Australian federal government for state governments and LGAs to (i) supply more and improved waste data and also to (ii) improve their waste data collection systems are embodied in the National Waste Policy Implementation Plan, 2010 report (EPHC 2010a, p. 19). These accountability expectations are enforceable on state governments through application of the Public Governance, Performance and Accountability Act, 2013. LGAs in this study, being those active in the SWSA jurisdiction, are obliged to provide waste data to the Tasmanian state government through application of the Environmental Management and Pollution Control Act, 1994 and the related Waste Management Regulations, 2010.

In meeting the strategic objectives of the National Waste Policy Implementation Plan, the outsourcing of waste management services are being advocated by the federal government by suggesting the creation of ‘multi-agency management arrangements’ and ‘active partnerships’ between governments and industry (EPHC 2010a, p. 9). The Tasmanian Waste Strategy reinforces the national outsourcing directive by recommending that LGAs engage in initiatives such as ‘collaborative partnerships’ with industry (Environmental Protection Authority 2009, pp. 3 & 9).

8.2.2 Outsourcing practices in the SWSA jurisdiction

A wide array of outsourcing practices (Appendix 3, 4 & 5) are observed in the SWSA jurisdiction. These outsourcing practices are in some instances found to be collaborative and often inter-local (Appendix 6). For example, Glamorgan Spring Bay Council aims to improve service delivery and respond to resource constraints by engaging in such collaborative outsourcing arrangements with other LGAs (Bel & Warner 2013; McIvor 2008):

Look for resource sharing opportunities with surrounding Councils, and

Partner with other councils and regional organisations to achieve community outcomes.....Continue to explore resource sharing and shared services initiatives with peak local government bodies and other Councils. (Appendix 6, para. 3 & 4)

The LGAs in the SWSA jurisdiction engage in these collaborative, network-type outsourcing arrangements of waste management services with actors in both the public and private sector (Delabbio & Zeemering 2013; LeRoux, Brandenburger & Pandey 2010; LeRoux & Carr 2010; Zeemering 2012a, 2012b; Zeemering & Delabbio 2013). In the process, a complex array of relationships between actors in structured regional networks, such as the SWSA, STCA, LGAT and SWS, are created.

LGAs in the SWSA jurisdiction engage in collaborative outsourcing arrangements, such as shared services and resource sharing practices, to improve service delivery and reduce costs (Appendix 3, 4, 5 & 6). Earlier Australian local government studies derived similar conclusions (Dollery & Akimov 2008b; Dollery, Akimov & Byrnes 2009; Dollery & Grant 2009; Dollery, Grant & Akimov 2010).

8.2.3 Accountability expectations of the Tasmanian government

LGAs in the SWSA jurisdiction are directed to commit to improvement of waste data collection systems, whether on an individual or collective basis, by the Tasmanian Waste and Resources Management Strategy through the development of individual or joint action plans (Environmental Protection Authority 2009, p. 6). The development of these corporate plans by LGAs in the SWSA jurisdiction is enforceable through the application of the Local Government Act, 1993.

The increase in the extent of regulation reflects the similar findings of Bebbington & Gray (1993) that regulation and policy directives with regard to environmental reporting are becoming more commonplace. The introduction of the various acts and public policy directives are clear examples of Gray, Brennan & Malpas's (2013) findings that distant relationships, such as between LGAs and the Australian federal government, result in more formal methods of accountability, such as more empowering legislation and regulation (Reid 2012) to avoid misalignment between accountability expectations and obligations.

Ball, Broadbent & Moore (2013) and similar studies caution that where a local government sector acts under a distant central government agenda, there is a likelihood that the integration of the central government's more formal accountability expectations with those of local communities service delivery expectations will be difficult (Ball, Broadbent & Moore 2002; Dumay, Guthrie & Farneti 2010; Gray 2002). This finding is supported by the Tasmanian government's perceiving serious shortcomings in the Tasmanian LGAs' ability to provide waste data to the Tasmanian state government by reflecting on incomplete data sets and the need to improve data collection (Environmental Protection Authority 2009, p. 1).

8.2.4 Nature of the principal/agent accountability relationships

In studying the scope and nature of this problem also referred to as a dilemma in the ICA framework (Feiock 2013), the nature of the accountability relationship between the federal government and LGAs was first explored. Strong accountability relationships require acceptance of an agent of the responsibility to account to the principal (Barton 2006). No evidence could be found from the corporate plans of the LGAs that they accept the obligation to improve waste data collection or waste data collection systems for the purposes of national reporting. With the exception of Hobart City Council and Glamorgan Spring Bay Council, no other councils made reference to regulatory waste management prescripts (Appendix 2, para. 3 & 9). The responses of interviewees clearly indicated that they do not consider their organisations' accountable to the federal government in respect of the supply of waste data; for example:

No, we're not particularly concerned about the federal government, if you like. Our main concern is satisfying the EPA.....we don't really care about that reporting to government; we care about that for our own internal purposes..... It's really EPA requirements. Whatever they want us to submit it in, whatever format, we will do that.
(Interviewee 11)

On a positive note, some LGA managers in the SWSA jurisdiction do accept responsibility for the improvement of regional waste data collection systems; for example:

Well, we worked really closely with the State Government back in '06, '07 to develop a reporting tool, which the State Government adopted and it's still on their website.
(Interviewee 9)

National policy makers and state government legislators should take note that whilst managers of LGAs and their service providers accept some responsibility on moral grounds for the improvement of regional waste data collection systems (Gray 1992), they accept responsibility for the supply of the data itself only on the basis of minimum legal requirements (Bebbington & Gray 1993). This implies that stronger state regulation is required to improve waste data collection.

8.2.5 The importance of waste data collection for national reporting purposes

As in the Kloot (2001) study, KPIs with regard to waste management are found to be lacking in the LGAs corporate plans, with only six of the 12 councils having clear KPIs related to waste management objectives (Appendix 2). In accordance with classic agency theory, LGAs in the SWSA jurisdiction are found to be self-interested agents (Jensen & Meckling 1976) with strong TCE views (Williamson 1979, 1981) driving waste management outsourcing decisions. For example, waste data are considered critical in urban LGAs to evaluate direct and indirect transaction costs related to waste disposal:

Waste data's critical for us running a business, particularly in terms of efficiency, also in terms of rehabilitation of our landfill. So if we look at our landfill, we're looking 10 to 15 years depending on – you can make one or two decisions with landfills: you fill them as quick as you can, and although your costs are divided over a shorter period of time, the revenue's higher. But you face the reality of – like many municipalities all around the world – this is your last landfill. Is it better to get money short term or is it better to keep space long term? (Interviewee 9)

Once LGAs decide to outsource waste disposal, they consider the responsibility to account for waste data to become that of the new service provider; for example:

In terms of our data, we [will] have few obligations once our landfill closes to report because our permit will be varied to show that we are no longer an operating landfill..... So data collection will be someone else's issue.....in terms of regulatory requirements for data, we will have limited requirements. (Interviewee 9)

The managers of LGAs and their service providers repeatedly indicated a preference for stronger legislation and regulation to communicate waste data to higher levels of government; for example:

From a personal perspective, I think it [communication between LGAs and the state government] needs to be more formalized, and clearer, so there's a certain regulation there, if you like. (Interviewee 10)

The Tasmanian government manager, in contrast, suggests that waste data remain the responsibility of LGAs and that the Tasmanian government assists in a partnership role in collecting and providing their waste data to the federal government; for example:

So what our role is basically, we have a [*sic*] – we work with the councils to compile their data, which then becomes the Tasmanian profile of waste data that goes up to the Commonwealth for our contribution to the National Waste Report. ...

What we've now been able to do is become very clear on the conversation we want to have with local government about the things we can support them on and participate in with them. So the waste data conversation is working quite well at a technical level. (Interviewee 8)

An analysis of the above responses suggests that the relationship between the Tasmanian state government and LGAs in the SWSA jurisdiction, whether as principal to LGAs or fellow agent to the federal government, will remain constrained until such time as a more complete accountability contract is negotiated with regard to the collection and supply of waste data for national reporting purposes (Hart & Moore 1988, 1999, 2008).

8.2.6 Service level agreements and accountability relationships

Communication is a critical element of a strong accountability relationship between various levels of government (Bigdeli, Kamal & de Cesare 2013; Burritt & Welch 1997). In contrast with the suggestion in Reid (2012) that service level agreements between different levels of government improves communication and hence accountability, no support could be found that such agreement improved the flow of data between LGAs, their service providers and higher levels of governments. Only one reference is made to such agreement in the corporate plans of the LGAs (Appendix 9, par 3). Interviewees are often unaware of the existence of such agreements and those that are aware strongly suggested that it does not improve the collection of waste data for national reporting purposes; for example:

.....but the fact that I've never even heard of it before – and I think, ‘Well, it's not that great a communication tool in that case.’ And I think quite often people put it on their

website as to say, 'Yeah okay, we'll put that on there.' And it's almost like a bit of a motherhood statement but nothing really actually happens out [*sic*] the other end. I suspect that [this] one might fit into that ball-court. I could be wrong, there could be someone here that gets a lot of value out of it but I haven't heard of it. (Interviewee 12)

8.2.7 *Incongruent waste data collection goals*

Policy makers should take note that strategic considerations regarding waste disposal to landfill in contrast with resource recovery and recycling are unique to Tasmania, as borne out by SWSA stating:

Internationally there are few jurisdictions with economies, governance structures, population characteristics and waste profiles similar to Tasmania. (Blue Environment 2011, p. 34)

Tasmania is performing dismally in terms of resource recovery and recycling in comparison with other states and international standards, with the amount of waste disposed at landfills in the SWSA steadily increasing (Blue Environment 2013, p. 9; Environmental Protection Authority 2009, p. 1). SWS, a joint LGA between four member councils, indicates that it will explore recycling only if it is commercially viable (Southern Waste Solutions 2012b, p. 9) and thus compatible with the primarily commercial strategic objectives of SWS and its member councils (Appendix 7, para. 2). The seemingly incongruent objectives of the SWSA, STCA and SWS (Appendix 7, para. 8) may result in tensions between the various SWSA member councils, which detract from meeting the federal government's accountability expectation of improved waste data and data collection systems (Heinrich, Lynn & Milward 2010; McIvor 2008; Vagadia 2012); for example:

SWSA at least appears to create a modicum of independence in their role as an authority. I think if the Southern Tasmanian Council Association was to take over that role – I think basically that is a political move to lock in Copping [a southern joint LGA regional landfill facility aka SWS] for basically all southern councils. (Interviewee 3)

8.2.8 *The flow of waste data across organisations and jurisdictions*

Waste collected from councils within the SWSA jurisdiction are disposed of in other jurisdictions, such as Launceston and Hamilton, and across jurisdictions within the SWSA

jurisdiction; for example, waste is disposed of at the Copping regional landfill either directly or indirectly by most councils in the SWSA jurisdiction. The SWSA remarked that the waste data flow across jurisdictions resulted in serious anomalies in reported waste data, and not enough detailed waste data are available to determine where wastes are generated and disposed of and what wastes are generated by the various sectors, such as the C&I and C&D sectors (Blue Environment 2011, p. 31). The flow of waste data is difficult to integrate across, in and between these networks (Ball & Bebbington 2008; Ball, Broadbent & Moore 2002), which some interviewees suggested is the result of funding and competency constraints (Interviewee 1 ; Interviewee 7 ; Interviewee 10).

In accordance with other Australian local government studies on sustainability reporting and environmental management accounting (Ambika, Amrik & Carol 2008; Qian, Burritt & Monroe 2011; Williams 2011; Williams, Wilmshurst & Clift 2011), evidence here is that LGAs in the SWSA jurisdiction are constrained in improving on waste data collection systems resulting from the lack of expertise to manage wastes and costing of waste data; for example:

I think local government is a practitioner in this, but I don't think there's a huge amount of expertise as to how business should work. And one reason for that is because councils don't have the discipline of actually having to rely on customers to be [*sic*] their income, because they've got recurrent, never-ending income from rates [and] government grants. (Interviewee 1)

The existence of multiple agents in the SWSA jurisdiction complicates the flow of waste data, as it is uncertain who is accountable for what waste data (Jensen & Stonecash 2005); for example:

You need to be careful. More isn't better in lots of cases, and less can be best, if you like. The more entities you have to deal with, the bigger the task is. The risk you run of data being corrupted, if you like, through a process if you're going through different – or more entities with different processes. (Interviewee 10)

8.2.9 The role of the Tasmanian government in waste data collection

A lack of guidance from the Tasmanian state government, as principal to LGAs and their service providers, constrains the agents to adequately account for waste (Miller 2005); for

example, the categorisation and definition of various MSW waste types are considered to be vague:

I do know that the categories that we report to the EPA – they're a bit vague in guidance [*sic*] as to which category which type of waste belongs in. And we've had a bit of confusion about what's commercial and industrial. (Interviewee 7)

Waste ultimately disposed of in landfill sites is the final point where waste data can be collected and serves as a final check for measuring performance against sustainability targets, such as waste reduction (Hyder Consulting 2011, p. 6). There are perceptions from some stakeholders that the EPA is not consistent in application of norms and standards over all seven landfill sites in the SWSA (Appendix 11, para. 8). The apparent lack of sanction of actors not complying with existing waste regulations also detracts from strong accountability relationships with the state government (Lindberg 2013). A number of participants suggested that improved political accountability is a prerequisite to improved managerial accountability; for example:

I think it's very difficult for it to be enforced, because there's not the impetus there from the authorities that oversee it for there to be any real enforcement. And so it's – without there being any sort of enforcement from people like the EPA that are supposed to track and manage waste collection, and therefore there's no real data collection either.....that's because the EPA is very underfunded and couldn't possibly do it.....if it was found to be important by state government, then there would be more funding. (Interviewee 3)

8.2.10 Data collection tools, techniques and funding

Data flow from landfills in the SWSA jurisdiction is also constrained by a lack of data collection techniques, such as weighbridges, volumetric measurement and waste audits (Appendix 9, para. 9). The lack of data recording tools of agents seriously impacts on the Tasmanian government's ability to adequately guide waste strategies and meet the federal government's accountability expectations:

Well, I think it is [waste data] very poor quality at the moment and I don't think it should be that poor. For instance, the EPA rightly say that the data looks like Tasmania doesn't recycle as much as other states. But then when you actually talk to them, they say, 'Well, that's not actually true. That's what the data says but our data is

faulty. We don't have the data.' And so they admit that. They think that our recycling rate is probably twice as much as is reported, but they just can't prove it. And part of that's because there isn't good data at all facilities because a lot of them don't have weighbridges..... The little landfill at [name withheld], I don't think that's got a weighbridge, and they wouldn't know what was landfilled and what was recycled. (Interviewee 7)

Improved data collection techniques are more costly and detract from the various disposal facilities' profitability, making improvement unlikely without additional incentives provided by higher levels of government; for example:

We'll have to put more staff, but I doubt if that will happen because these days, it is about business and unless it is done – I mean, I'm afraid to say it, environment or safety and things like that, they're all priorities. But they're all, at the end of the day, counted with dollars. (Interviewee 5)

Participants in the study do not believe that the introduction of a compulsory landfill levy will necessarily improve regional waste data collection and data collection systems. For example, some interviewees suggested that potential funding arising from funds generated by the levy will be applied in more pressing operational matters:

The levy itself, I don't know whether that would improve the systems. Legislation needs to be consistent throughout the State, which it isn't at the moment..... I don't think it would affect or assist, because I don't think there'd be any monetary return relating to systems. (Interviewee 10)

8.2.11 Contract management in support of accountability relationships

In addition to the agency relationship between the Tasmanian government and LGAs with their service providers in the SWSA jurisdiction, LGAs also stand as principals in agency relationships with their individual service providers. A number of councils do not require their contractors to provide waste data regarding the amount of kerbside recyclables collected through enforcement of appropriate contract provisions (Appendix 9, para. 7). Similar to the findings of Qian et al. (2011) and Ball, Broadbent & Jarvis (2006), evidence was found that not all LGAs in the SWSA jurisdiction are able to demand waste data from their service providers or to improve on contract stipulations regarding waste data collections; for example:

If I look at our waste contracts, I think that's got some stuff in there that just shouldn't be in there and stuff that should be in there, that's not in there so it's got it's issues but it's tied up with another-- it'll be another two or three years before the opportunity exists to change that again..... There's no clause in there about waste data whatsoever. There's other stuff about the type of machinery and things like that but nothing about the actual waste data. (Interviewee 12)

8.2.12 Responses of agencies in terms of the ICA framework

Agency theory alone does not address all the complexities associated with outsourcing of waste management services in the SWSA jurisdiction; for example, horizontal accountability relationships resulting from cooperative outsourcing are not necessarily based on an agency relationship (Bertelli & Smith 2010). This study followed the ICA framework as the primary theoretical approach, which includes but is not limited to agency theory as a theoretical foundation. The ICA framework suggests that the natural response preferences of LGAs to policy interventions from higher levels should be considered once the scope and nature of the problem the policy intervention seeks to address is understood (Feiock 2013).

This study found that in response to the accountability expectations of higher levels of government, the outsourcing of waste data collection and improvement of waste data collection systems may be an preferred option for some LGAs; for example:

So the whole idea of all the data collection and so forth.....should be one of those ones that's considered by that more regional type body [*sic*] as compared to individual councils. (Interviewee 12)

The outsourcing practices of LGAs in the SWSA are primarily guided by the demands of local constituencies that operational efficiencies be improved (Burritt & Welch 1997) rather than the federal government's accountability expectations. Financial considerations, such as transaction costs and cash flows, are important reasons why LGAs in the SWSA jurisdiction outsource waste management services (Appendix 3). This finding is in accordance with other outsourcing studies (Bel & Fageda 2007, 2009; Bel, Fageda & Mur 2014). Managerial concerns regarding social choice issues, such as improved service delivery, play a role in the decision of LGAs to outsource waste management services (Bel & Fageda 2007). This study found that improvement in service delivery through innovation and technological investments is also a major reason why the LGAs in this study outsourced waste management services

(Appendix 4, para.5). Political influence and strategic considerations play a role in the outsourcing decisions of LGAs in the SWSA jurisdiction (Appendix 7, para. 1) This finding is in line with other studies that found that strategic considerations and political influence play a role in Australian LGAs' outsourcing decisions (Bisman 2008; Kloot & Martin 2007).

Transaction costs, managerial concerns and social choice issues not only influence the decision to outsource or not but also the type of outsourcing arrangement contemplated by LGAs (Bel & Fageda 2007, 2009). LGAs in the SWSA jurisdiction engage in outsourcing initiatives in a collective institutional setting when there are both financial and social choice incentives for them to do so (Appendix 3, para. 7; Appendix 4, para. 4). This finding is in accordance with other studies that found that highly specified and difficult-to-measure services (Williamson 1999), such as highly regulated landfill developments, are more likely to be outsourced by LGAs to municipal corporations or through other similar inter-local arrangements than normal arm's-length commercial contracting (Bel & Fageda 2008; Bel, Fageda & Mur 2014). For example, the SWS as the primary supplier of waste to landfill disposal services is governed by a complex management structure of unequal votes and varying management involvement by its four member councils (Southern Waste Solutions 2012a, p. 11). SWS has the primary aim of maximising economic benefits to its members (Appendix 7, para. 2, 6 & 8).

Councils in the SWSA jurisdiction respond to institutional collective action policy problems or dilemmas (Feiock 2013) through alignment with the SWSA, STCA and LGAT networks (Appendix 11). SWSA is a network largely motivated by improvement of sustainability principles as contemplated by the National Waste Policy Implementation Plan, whilst the STCA and LGAT are networks involved in aspects of waste management that are to a large extent motivated by political and economic principles; for example:

STCA wants to take hold of waste – but again that's a political thing. STCA is just the mayors which run it [*sic*], it's a political thing. (Interviewee 5)

Councils/principals contract with the various regional authorities/agents with different relational and contractual management measures employed to monitor the agents; for example, Glenorchy City Council observes a closely connected relational approach:

Actively participate in peak local government bodies (LGAT & the STCA) to advance community priorities. (Appendix 11, para 3)

8.2.13 *Best-practice outsourcing frameworks*

The ICA framework suggests that mechanisms available to LGAs to adequately respond to policy interventions and directives from higher levels of government should be understood when exploring problems or dilemmas emanating from these policy interventions and directives (Feiock 2013). In contemplating outsourcing practices that will result in efficient ‘multi-agency management arrangements’ (EPHC 2010a, p. 9) and ‘collaborative partnerships’ (Environmental Protection Authority 2009, p. 3 & 9), a number of outsourcing frameworks are identified which can guide and assist efficiency-seeking outsourcing practices (Ali, Ali Asghar Anvary & Ali 2008; Hassanain & Al-Saadi 2005; Lacity & Khan 2009; McIvor 2008; Mohr, Sengupta & Slater 2011; Quinn 1999, 2000; Vagadia 2012; Verner & Abdullah 2012; Zhu, Hsu & Lillie 2001).

These frameworks are limited by the assumption that parties to outsourcing arrangements are indeed willing or able to share information (Quinn 2000). Outsourcing frameworks should therefore be used in conjunction with theories explaining the behaviours of the parties to outsourcing (McIvor 2008). This study found some evidence that not all LGAs and their service providers are indeed willing or able to supply waste data; for example:

When we go to each council and say, ‘Can you please provide data on actually how much hazardous waste is generated within your municipality?’ We get basically a response of, ‘We don't know, we don't have collection or we produce basically none.’ (Interviewee 3)

The best-practise outsourcing frameworks suggest that principals can protect themselves against potential holdup costs by either entering into long-term contracts or by participating in the governance structures of the service providers (agents) (Brown, Potoski & Van Slyke 2010; Zhu, Hsu & Lillie 2001). LGAs in the SWSA jurisdiction are prudent in their outsourcing initiatives by either entering into strong written contracts with waste management service providers (Appendix 10) or by participating in the governance structures of those service providers. For example, the rules of SWS make it clear that participation by its member councils in its governance structures is by intent long term and tied to a 50-year lease with the Sorrell Council (Southern Waste Solutions 2012a, p. 29).

The data extracted from the LGA corporate plans are not sufficiently clear to contrast the duration of all the inter-local contracts where councils are not participating in governance

structures. Some indications are that these are generally 20 years in duration (Appendix 10, para. 6 & 7). Static long-term contracts and long-term governance arrangements may not always be desirable in a changing regulatory environment, as councils may find themselves tied into contractual arrangements that prevent them from complying with new or revised regulatory directives regarding sustainability targets, such as waste reduction and resource recovery (Ball, Broadbent & Jarvis 2006).

The SWSA observed that the collection and public reporting of waste information and the sharing of such knowledge is inadequate in the SWSA jurisdiction. According to the SWSA, there is very little information available on what types of waste are disposed of at landfill sites, with the volume and tonnages disposed of all landfill sites appearing equally uncertain (Appendix 9, para. 5–8).

Participants mostly considered the policy environment uncertain, which detracts from accounting for waste data. Outsourcing arrangements by LGAs to improve on waste data collection and reporting will not meet the accountability expectations of the federal government until such time as the unstable regulatory environment is improved upon (Bebbington & Gray 1993):

The state level policy for a waste strategy is out of date. It requires reviewing. The agreement that local government concluded with the state government, establishing regional waste groups, that was over ten years ago. That hasn't been revisited or reviewed. (Interviewee 1)

I think there's space for regulation, that's what I suppose I'm getting at because without it – I think that's the driver so if I do without it, you don't have a driver there. If you leave it up to the individual organizations then they'll only be interested in providing data if they get something back. If they're not getting anything back, they'll just do the minimum that they have to do and I think it's fair to say, we're not getting anything back so that's probably what's happening. (Interviewee 12)

8.3 Summary

In this chapter, the findings from the textual document analysis are consolidated with the responses of interviewees regarding areas of concern. The findings are discussed with the aim of reaching the conclusions presented in the following chapter.

Chapter 9: Conclusion

9.1 Introduction

This chapter provides a conclusion to the discussion of the findings in the previous chapter. It points out the limitation of the research methods used and considers areas that require future research.

9.2 Summary

This study responds to the call of Qian, Burritt & Monroe (2011) to explore environmental management accounting practices in waste management industries. They suggest that researchers should investigate how larger environmental management accounting systems are impacted by actions and attitudes of downstream players such as remanufacturers and landfill operators. The study focusses on the accountability expectations of the Australian federal government for lower level environmental management accounting systems to supply adequate waste data for national reporting purposes.

It is shown that LGAs and their service providers in the SWSA jurisdiction engage in a wide range of waste management services, including landfill operations that generate waste data. The minimum duty of accounting for waste data is that of compliance with the law and reporting on the extent of compliance (Bebbington & Gray 1993). However, Gray (2005) contends that the right to information is not just derived from legal or quasi-legal sources but could also be based on moral grounds. This study finds that the LGA managers and the managers of their service providers are only willing to supply waste data through an accountability relationship with higher levels of government based on compliance with minimum legal requirements. These managers do not consider themselves accountable to the federal government for the supply of waste data on moral or other grounds.

Ball, Broadbent & Jarvis (2006) argue that there is a need to understand the best channels to disseminate good waste practices and new ideas. The findings reported here show that LGA managers and managers of their service providers express a willingness to contribute to the improvement of regional waste data systems rather than a willingness to be accountable to higher levels of government for the data itself. In line with the findings of Qian, Burritt & Monroe (2011), it is suggested that policy makers should take note of the willingness of actors in local government to engage in environmental management accounting systems. The

improvement in environmental management accounting systems will assist local government to meet the federal government's accountability expectations.

Ball, Broadbent & Jarvis (2006) suggest that improvements in sustainable waste management practices are supported financially and politically by some central governments. The participants in this study do not consider improvement to regional waste data collection systems to be adequately guided by the Tasmanian government due to EPA resource constraints.

Ball, Broadbent & Jarvis (2006) also suggest that changes are necessary at political and institutional levels, and in terms of individual and collective behaviour and consciousness, to make the transition to global sustainable waste management practices. They argue that sustainability accounting and reporting is part of, and could support, such change. This study finds that the actors in the SWSA jurisdiction do not behave collectively. It is found that the state government considers the ownership of waste data for the purposes of national reporting to be that of LGAs and their service providers, whilst managers of agencies do not accept such responsibility and consider the supply of waste data a statutory responsibility, to the state government in terms of state-driven legislation and regulation. They believe the ownership of the waste data, for the purposes of national reporting, passes to the Tasmanian state government.

Qian & Burritt (2007) found that the type of local governments and waste services and operations do not provide full explanations for the variability of current environmental accounting practices for waste management in local government in Australia. Here it is also found that waste data collection tools of facilities situated in the SWSA jurisdiction are inadequate to satisfy the accountability expectations of the federal government. The poor data collection tools constrains the ability of these agencies to adequately collect and supply waste data for the purposes of national reporting and thus offers an explanation for variable environmental accounting practices.

Reid (2012) argues that inter-governmental agreements appear to be useful mechanisms for local governments to influence the agenda of higher level authorities, even if all they achieve is regular contact and communication. In contrast this study finds that the partnership agreement to facilitate improved communication between the Tasmanian government and LGAs is ineffective in the SWSA jurisdiction with regard to the supply of waste data and improvement of data collection systems. Stronger support is found for the contention that

councils need a strong empowering statute that guides behaviour (Reid 2012; Brown, Potoski & Van Slyke 2007, 2008, 2010).

Brown, Potoski & Van Slyke (2006) found that legal mandates define the boundaries within which public managers can operate to optimize and balance targeted values, whereas contract management and monitoring incapacity increase the risk of failed contracts. The research contained in this thesis concurs with their findings in the context of waste management. LGA managers do not believe that once LGAs have outsourced waste disposal services they should be held accountable for the supply of waste data to higher levels of government (Interviewee 9; Interviewee 12). This has important implications for federal policy makers, who consider LGAs instrumental in providing waste data for national reporting purposes even if they do not own or operate landfill sites. Some long-term waste contracts in operation in the SWSA jurisdiction are inadequate with regard to the ability of LGAs to demand waste data from their service providers. LGAs are constrained by the length of the contract periods to negotiate new clauses enabling them to demand the waste data expected by the federal government.

Simões & Marques (2012) call for more studies on regulatory impacts on economic performance of waste management enterprises. In this context it is found that an improvement in the flow of waste data demanded by the Tasmanian government and the agencies responsible for supplying requires costly renegotiation. The respondents in this study do not believe that the introduction of a compulsory waste disposal levy will generate sufficient funding to facilitate renegotiation or to provide incentives for agencies to improve their waste data collection systems. Policy makers at both state and federal level should contemplate the cost of improving waste data collection and whether mooted waste disposal levies will be sufficient to defray the increased waste collection costs.

Carr & Hawkins (2013) found that third parties play an important role in negotiating agreements and reducing environmental uncertainty that can undermine cooperation. This study finds a lack of certainty which of the SWSA, STCA, SWS or LGAT network should have responsibility for supplying waste data to the Tasmanian government. These networks hold conflicting views on the handling, treatment and disposal of MSW. Participants to the study do not believe the process of assigning responsibility for improving regional waste data collection networks are adequately guided by the Tasmanian legislature.

Ball & Bebbington (2008) and Ball, Broadbent & Jarvis (2006) call for more accountability studies on complex public sector networks. The outsourcing practices of LGAs in the SWSA jurisdiction resulted in some complex forms of ‘multi-agency arrangements’ and ‘partnerships’ as contemplated by public waste policy prescripts. The findings here indicate that LGA managers respond to directives from higher levels of government only to the extent that it is regulated by state legislation. Managers of LGAs and their service providers’ appear to view waste regulation as the preferred mode of communication.

Lodhia, Jacobs & Park (2012) found that Australian public managers are significantly influenced by coercive legislation when reporting on the environment. Managers of LGAs and their service providers, in the SWSA jurisdiction, also respond to coercive regulatory requirements when reporting waste data. The conclusion is therefore that improved regulation would facilitate improved communication. In the absence of improved communication the Australian federal government’s accountability expectations will not be met. Improved regulation will facilitate communication and consultation between all principals and agents in the SWSA jurisdiction which in turn will satisfy the accountability expectations of the Australian federal government for more and improved waste data and improved data collection systems.

9.3 Limitations of this study

The textual analysis of the narrative content of the corporate plans and transcribed interviews of actors in the SWSA jurisdiction is highly interpretive and has its limitations. Data extracted from the reports largely reflect on economic and institutional aspects and are supplied in ample detail for other researchers to arrive at different conclusions. Social aspects – such as public managers’ fears, career aspirations and trust between actors in the networks, political influence and ideological pre-dispositions – are difficult to gauge from this research method.

While it is difficult to generalise, this study offers some messages for the wider global waste management sector. Lessons learned from this study are likely to find application in the local government sector in other Australian states. The conclusions drawn from the data obtained in this case study cannot be transposed to other jurisdictions without first obtaining additional empirical evidence due to the unique geographical and cultural context of southern Tasmania.

9.4 Future research

Evidence was found that that relationships between LGAs in the SWSA jurisdiction and the Tasmanian state government are strained, which may detract from establishing strong accountability relationships; for example:

The relationship between local government and state government back in the nineties when there was the rationalisation of councils from forty six to twenty nine - and it wasn't a cooperative rationalisation; it was a realignment of the boundaries. So local government felt; 'Well, we're pretty powerless.' Then the levy [discussions] came along, and then there was going to be the great Hobart amalgamations as well at that time...So there was a lack of trust, I think. (Interviewee 8)

As discussed earlier in the thesis, partnerships and collaborations require a large measure of trust. The lack of trust results from a fear of amalgamations and rationalisations of LGAs. Whether the lack of trust plays a role in the waste outsourcing decisions of LGA managers to counter amalgamations and service consolidations requires future research.

The governance and accountability of new structures that develop from collaborative waste management outsourcing practises also require future research. Local government studies from other international jurisdictions caution against the use of municipal corporations designed to avoid public scrutiny and regulatory oversight (Doberstein 2013a; Girth 2014; Tavares & Camões 2010). SWS as a joint LGA, with powers similar to those of a municipal corporation, limits accessibility to certain documents; for example:

Minutes, papers and reports marked 'Commercial-in-Confidence' are, unless the Authority or the Board agrees otherwise, to be made available only to Members of the Authority and Directors and, through the 'closed agenda', to Participating Councils. (Southern Waste Solutions 2012a, p. 20)

A community representative argues that contracts in the public sector should not be withheld from public scrutiny:

I can't see anything really that if it impacts on community through local government that shouldn't be open. I can understand within a small community – especially with controlled waste reporting..... I can't really see why there should be any ambiguity or any commercial in confidence. (Interviewee 4)

In light of the community concerns, mechanisms to enhance public accountability of hybrid institutional arrangements in respect of outsourced waste management services require future research. Aspects such as representative board representation of joint LGAs, public attendances of meetings, consolidation of results and adequacy of stakeholder/public interaction through environmental impact assessments are considered to be important accountability topics for future research.

APPENDICES

Appendix 1	Australian classification of LGAs	Garbage collection frequency	Kerbside garbage collection type	Kerbside recyclables frequency	Recyclables collection type	Land area	Population	Population per km of road	Public recycle bins
Brighton Council	<i>Urban Small</i>	<i>2 weekly</i>	<i>240L Bin</i>	<i>2 weekly</i>	<i>240L Bin</i>	<i>170</i>	<i>15813</i>	<i>95,66</i>	<i>No</i>
Central Highlands Council	<i>Rural Agricultural Medium</i>	<i>weekly</i>	<i>140L Bin</i>	<i>2 weekly</i>	<i>50 L Crate</i>	<i>7976</i>	<i>2322</i>	<i>3,09</i>	<i>Yes</i>
Clarence City Council	<i>Urban Medium</i>	<i>weekly</i>	<i>80L Bin</i>	<i>2 weekly</i>	<i>140L Bin</i>	<i>377</i>	<i>53081</i>	<i>115,08</i>	<i>Yes</i>
Derwent Valley Council	<i>Rural Agricultural Very Large</i>	<i>weekly</i>	<i>120L Bin</i>	<i>weekly</i>	<i>50 L Crate</i>	<i>4103</i>	<i>9956</i>	<i>30,66</i>	<i>No</i>
Glamorgan Springbay Council	<i>Rural Agricultural Medium</i>	<i>weekly</i>	<i>120L Bin</i>	<i>2 weekly</i>	<i>120L Bin</i>	<i>2587</i>	<i>4507</i>	<i>12,77</i>	<i>Yes</i>
Glenorchy City Council	<i>Urban Medium</i>	<i>weekly or 2 weekly</i>	<i>140L or 240L Bin</i>	<i>Weekly or 2 weekly</i>	<i>140L or 240L Bin</i>	<i>120</i>	<i>45382</i>	<i>144,25</i>	<i>Yes</i>
Hobart City Council	<i>Urban Medium</i>	<i>weekly</i>	<i>120L Bin</i>	<i>2 weekly</i>	<i>240L Bin</i>	<i>77</i>	<i>50342</i>	<i>154,09</i>	<i>Yes</i>
Huon Valley Council	<i>Rural Agricultural Very Large</i>	<i>weekly</i>	<i>120L Bin</i>	<i>None</i>	<i>None</i>	<i>5947</i>	<i>16020</i>	<i>21,77</i>	<i>No</i>
Kingborough Council	<i>Urban Medium</i>	<i>weekly</i>	<i>80L Bin</i>	<i>2 weekly</i>	<i>140L Bin</i>	<i>719</i>	<i>35090</i>	<i>63,63</i>	<i>No</i>
Sorell Council	<i>Rural Agricultural Very Large</i>	<i>weekly</i>	<i>80L or 140L Bin</i>	<i>2 weekly</i>	<i>140L Bin</i>	<i>582</i>	<i>13407</i>	<i>33,19</i>	<i>No</i>
Southern Midlands Council	<i>Rural Agricultural Large</i>	<i>weekly or 2 weekly</i>	<i>120L or 240L Bin</i>	<i>Weekly or 2 weekly</i>	<i>65L Crate</i>	<i>2611</i>	<i>6306</i>	<i>7,65</i>	<i>No</i>
Tasman Council	<i>Rural Agricultural Medium</i>	<i>weekly</i>	<i>120L Bin</i>	<i>weekly</i>	<i>Crate</i>	<i>659</i>	<i>2413</i>	<i>9,39</i>	<i>No</i>

(Blue Environment 2011; Local Government Board 2012)

Appendix 2	Key performance area	Data on key performance indicators in corporate reports
Central Highlands Council (Central Highlands Council 2012, p. 41 & 42)	Garbage removal and kerbside recycling	‘No. of services.....Participation Rate..... Amount Collected..... No. of complaints..... Comply with budget.....’
	Landfill operation	‘Amount of fees collected per opening hour.....No. of users..... No. of complaints.....Cost per opening hour.....’
	Landfill development	‘Completed within budget allocation.....’
Glamorgan Spring Bay Council (Glamorgan Spring Bay Council 2013a, pp. 74, 76 & 86)	Waste management programs and projects	‘Compliance with environmental licence conditions..... Increased community participation in recycling..... Acceptable Waste Transfer Station operations..... Operation cost reduction in Waste Management.....’
	Waste management and recycling services	‘Maintain appropriate level of service that is equivalent to community expectations’
	Street cleaning	‘Number of complaints in relation to overall township presentation and cleanliness.’
Hobart City Council (Hobart City Council 2013, p. 9 & 10)	City Cleanliness	‘Community survey results, rating 1-5, 1 being worst, 5 being best’
	Waste Management	‘Kerbside recycling – 4000T by 2013..... Kerbside waste – 13,000T by 2013..... Green waste compost – 9,500T by 2013.....40% by 2013.....100% compliance.....annually 363 days annually..... 16,550 Tonnes of CO2 by 2013.....’
Hobart City Council (Hobart City Council 2010, p. 14)	Waste Management	‘Monitor the progress of the Waste Advisory Committee (WAC), and its Local Government Representative(s), when put in place.’
Huon Valley Council (Huon Valley Council 2010, p. 21)	Waste Management	‘Increased volume of recycling..... Decreased household waste collected..... Establishment of tip shop at Huonville Waste Transfer Station.’
Kingborough Council (Kingborough Council 2013, p. 7)	Waste Management	‘Volume of waste going to landfill..... Composting program..... Volume of recycled material..... Extent of green waste recycling..... Number of local recycling enterprises.....’

Appendix 3	Data on financial objectives, costs and cash flow considerations underlining the SWSA-LGAs' outsourcing practices
Glamorgan Spring Bay Council (Glamorgan Spring Bay Council 2013a, p. 74)	'Develop, implement and monitor an efficient and environmentally responsible Waste Management Strategy that provides cost effective disposal methods for the municipality and encourages the participation of local enterprises.....'
Hobart City Council (Hobart City Council 2010, p. 6)	'To ensure waste management services are effective and efficient, it is necessary to identify opportunities for service delivery..... taking into consideration Council's fit its performance and level of service..... This will involve internal assessments and reviews, and benchmarking processes.'
SWSA (Blue Environment 2011, p. 45)	'.....hydrogeological characteristics may see the impact of leachate on the surrounding environment for 100-200 years, the future need and cost of rehabilitation may be significant. The lack of full cost recovery included in landfill gate fees charged in the past means that there may be a large gap in council resources for future rehabilitation, management and monitoring of closed landfills.'
SWSA (Blue Environment 2011, p. 72 & 74)	'.....funding for waste minimisation and resource recovery must come from somewhere.....'user pays' principle.....A levy applied to landfilled waste is the most equitable way of apportioning the cost to waste generators, while also encouraging material segregation and recovery..... If a levy is introduced only on C&I waste, the financial impacts on SWSA member councils may be limited.....if a levy is applied to all waste.....councils may require rate increases and communities should be prepared for this.....'
SWS (Southern Waste Solutions 2012b, p. 3)	'Remain commercially focussed and market competitive and use appropriate pricing mechanisms to enhance commercial viability.....Provide quantifiable economic benefits to Owner Councils and work towards the achievement of sustainable long-term financial returns on investment for Owner Councils.....Minimise the need for short-term or emergency cash injections from Owner Councils.....'
SWS (Southern Waste Solutions 2012b, p. 3)	'Negotiate commercially attractive long-term contracts to complement the life of the Copping site, and seek the site operator's support to share any emerging economies of scale.'
Tasman Council (Tasman Council 2011, p. 32)	'Increase the cost effectiveness of Council operations through resource sharing with other organisations.'
Tasman Council (Tasman Council 2013, p. 13)	'Council's long term involvement with the Copping landfill will continue with the new business and board structure delivering improved guidance and financial outcomes both with regard to shorter term profitability and debt servicing.'

Appendix 4	Data on service delivery through innovation and technological investment and resource constraints underlining the SWSA-LGAs' outsourcing practices
Central Highlands Council (Central Highlands Council 2012, p. 7)	'Programmes are implemented using Council staff and resources together with the employment of external contractors and other service providers. External providers are supervised by Council staff.'
Central Highlands Council (Central Highlands Council 2012, p. 38)	'Actively pursue resources to assist in environmental and natural resource management planning through programs such as Caring for our Country or by contracting with external agencies to provide specialist local services.'
Glenorchy City Council (Glenorchy City Council 2013a, p. 17)	'.....deliver a range of services vital to the Glenorchy community, including advocacy for additional services... waste management.....Identify opportunities for outsourcing services that will create value for money and meet the expectations of the community.'
Glenorchy City Council (Glenorchy City Council 2013b, p. 13)	'Identify and facilitate linkages with Council and other service providers to create opportunities for our communities..... Advocate for, partner with, or deliver services that address identified levels of community need.'
Hobart City Council (Hobart City Council 2010, p. 17)	'Continuous improvement of waste management services occurs through innovation and new technologies. It is essential that the Council continues to be aware of possible improvements to services through innovation. This will occur through professional development and involvement with regional authorities'
Hobart City Council (Hobart City Council 2010, p. 7)	'This Plan has identified the need to construct a Waste Transfer Station at McRobies Gully in the near future..... identified the need to construct a Resource Recovery facility at the Waste Management Centre. This is required in order to provide a best practice facility for the receipt (<i>sic</i>) of recyclable materials and to maximise the recovery of discarded resources.'
Hobart City Council (Hobart City Council 2010, p. 10)	'Progressively rehabilitate the McRobies Gully Waste Management centre.....prepare a comprehensive rehabilitation plan for.....approval by the Environmental Protection Authority (EPA)..... Ensure appropriate funding is provided to conduct works as required under the rehabilitation plan.'
Kingborough Council (Kingborough Council 2011, p. 9)	'Failure to provide community services in a timely manner due to inadequate knowledge, skills or resources.'
Sorell Council (Sorell Council 2008, p. 9)	'Access external expertiseTransfer knowledge into business processes..... Transfer knowledge to the community..... '
SWS (Southern Waste Solutions 2012b, p. 1)	'Keep abreast of and invest in appropriate and affordable advanced technology.....to provide superior solutions for the receipt, transport and containment of all permissible waste including the preload compaction, treatment and high payload transport of medical waste.'

Appendix 5	Data on strategic considerations and political influence underlining the SWSA-LGAs' outsourcing practices
Derwent Valley Council (Derwent Valley Council 2011, p. 4)	'.....participation and building relationships to gain unity and find common ground on issues.....'
Hobart City Council (Hobart City Council 2010, p. 7)	'Investigate issues associated with collection, receival (<i>sic</i>) and transport of waste to another facility following closure of the landfill.....Consider options to maximise the life of McRobies Gully landfill through diversion of waste to other facilities.'
Hobart City Council (Hobart City Council 2010, p. 13)	'Participate in and support the household hazardous waste collection program currently coordinated by the Local Government Association of Tasmania.'
Hobart City Council (Hobart City Council 2010, p. 13)	'Investigate and implement 'best practice' procedures for acceptance of materials to landfill (ie not accepting certain waste types – TVs, batteries, oils etc)....'
Hobart City Council (Hobart City Council 2010, p. 14)	'Work in co-operation with neighbouring and other Councils to develop further opportunities in the areas of resource sharing and regional co-operation..... Liaise with other Councils in information sharing and benchmarking process.'
Sorell Council (Sorell Council 2012b, p. 2)	'Review of Local Government pressuring the sector to facilitate mergers that are politically motivated at the expense of community collaboration.....Actions/Controls in place.....Independent Review of Structures for Local Governance and Service Delivery in Southern Tasmania undertaken by STCA.....'
Sorell Council (Sorell Council 2008, p. 11)	'Cooperation with other Councils in the Southeast Region.....Identify regional cooperation opportunities.....Engage with and lead other councils.....Implement agreed cooperative arrangements.....'
SWS (Southern Waste Solutions 2012a, p. 9)	'Each Participating Council is to use the Site as its principal landfill refuse disposal site unless otherwise agreed in writing by the Authority.'
SWS (Southern Waste Solutions 2012a, p. 8)	'.....to transfer assets and liabilities from the Authority to a Council or from a Council to the Authority.....to transfer employees and the rights of employees from a Council to the Authority, or from the Authority to a Council.....'
Tasman Council (Tasman Council 2011, p. 32)	'Periodically review outsourcing arrangements to ensure they are providing the best value for money.'

Appendix 6	Data on strategic service arrangements when outsourcing in corporate reports
Clarence City Council (Clarence City Council 2010, p. 10)	‘Consider Council’s strategic direction in relation to our neighbouring Councils including resource sharing, opportunities for joint tenders, expansion of the Copping Refuse Site Joint Authority and other opportunities for mutual benefit’
Derwent Valley Council (Derwent Valley Council 2011, p. 8)	‘To develop partnerships [with] relevant stakeholders on the development, management and maintenance of services in the municipality..... Actively pursue efficiency gains through resource-sharing.’
Glamorgan Spring Bay Council (Glamorgan Spring Bay Council 2013a, p. 34)	‘Look for resource sharing opportunities with surrounding Councils’
Glenorchy City Council (Glenorchy City Council 2013a, p. 28)	‘Partner with other councils and regional organisations to achieve community outcomes.....Continue to explore resource sharing and shared services initiatives with peak local government bodies and other Councils’
Hobart City Council (Hobart City Council 2010, p. 14)	‘Develop strategic linkages with other Councils for resource sharing.....Work in co-operation with neighbouring and other Councils to develop further opportunities in the areas of resource sharing and regional co-operation.’
Kingborough Council (Kingborough Council 2013, p. 3)	‘Promote the concept of resource sharing to deliver cost effective services to the community.....Actively research and develop opportunities for initiating joint projects and obtaining external grantsDevelop and maintain strong networks and communication channels with other spheres of Government.’
Sorell Council (Sorell Council 2012a, p. 2)	‘Proactively to seek regional resource sharing opportunities’
Southern Midlands Councils (Southern Midlands Council 2012, p. 32)	‘Identify opportunities for resource sharing with other Councils. Identify and implement working relationships with the Councils in our sub region across a wide range of operational and support areas.....’
Southern Waste Solutions (Southern Waste Solutions 2012b, p. 4 & 5)	‘Actively encourage other Councils to join the Authority.....Continue to work with Hobart and Glenorchy City Councils to identify beneficial opportunities for them to utilise the Authority’s facilities..... Work with Brighton Council to identify beneficial opportunities for that Council to utilise the Authority’s facilities’
Tasman Council (Tasman Council 2011, p. 32)	‘Increase the cost effectiveness of Council operations through resource sharing with other organisations.....Continue to identify opportunities for resource sharing with other Councils.....’

Appendix 7	Data on the goal congruence governance dimension in corporate reports
Hobart City Council (Hobart City Council 2010, p. 14)	‘The McRobies Gully landfill is expected to be closed by 2017. The Jackson Street Waste Management Centre has an estimated remaining life of 19 years. The Copping landfill has an estimated remaining life of several hundred years. The difference in landfill lives is an issue that will need to be addressed when considering any partnership arrangements. Hobart City Council officers are working closely with other local government authorities such as Kingborough Council and Glenorchy City Council to ensure that any future developments are planned at a regional level.’
Southern Waste Solutions (Southern Waste Solutions 2012b, p. 1).	‘To receive, contain and, where possible, utilise waste in accordance with best environmental and commercial practice to the benefit of stakeholders and customers.’
Southern Waste Solutions (Southern Waste Solutions 2012b, p. 8)	‘Achievement.....of a cooperative working arrangement with Hobart and Glenorchy City Councils.’
Southern Waste Solutions (Southern Waste Solutions 2012a, p. 6 & 24).	‘.....to manage successfully the Site and Balance Area by.....operating efficiently in accordance with sound commercial practice.....maximising the net worth of the Authority’s assets; and.....operating and managing both to maximise benefits to Participating Councils’
	‘The Business Plan shall include performance measures, and reflect these measures in reporting the achievement of strategic outcomes and objectives for the year..... Subject to any commercially sensitive aspects being separated into a separate section, the Plan shall be made fully accessible to stakeholders and to the public.....The ‘open’ sections of the Authority’s Annual Reports and Business Plan shall be made available for publication in the public domain on Participating Council websites.’
Southern Waste Strategy Authority (Blue Environment 2011, pp. 2, 65 & 68)	‘.....the purpose of SWSA is to.....implementation of the Southern Waste Management Strategy’. Its function is ‘to provide the most cost effective management and facilitation of municipal waste minimisation programs, waste stream control and performance monitoring.....’
	‘.....future projections of landfill airspace needed (including likely achievements of waste minimisation programs).....each landfill site’s capabilities (including engineering profile, compaction rate, operating and management characteristics).....waste generation centres and transport needs.....economic analysis of transport options, landfill operation & management costs and cost recovery.’
	‘The Copping landfill authority has a financial interest in maximising revenue by maximising waste disposed to landfill. This is in opposition to the waste minimisation responsibilities of SWSA and the recommended guiding principles. Incorporating both objectives within the same organisation would result in a fundamental internal conflict of interest.’

Appendix 8	Data on the alignment of stakeholder values as a governance dimension
Brighton Council (Brighton Council 2011, p. 1)	‘Involve key stakeholders, working together, to develop strategies to achieve the best possible outcome for the Brighton Municipal Area.....the best available infrastructure to our community by third party providers’
Clarence City Council (Clarence City Council 2010, p. 10)	‘Develop stronger sub regional, regional and country wide alliances to best represent Clarence’
Southern Waste Strategy Authority (Blue Environment 2011, pp. 9, 12, 28, 60, 66, 67 & 68)	‘There is not enough detailed information to determine the generation by sector.....Copping landfill figures would indicate a high percentage generation by the C&I sector.....anomalies.....in recording municipal waste deposited at Copping and the lack of information available on C&I and C&D waste being deposited at SWSA member landfills, does not allow for meaningful sector-based analysis.’
	‘to plan for the management of municipal waste in the region in partnership with member councils.....to coordinate the activities of member councils that implement state and regional policies, strategies and programs relating to waste.....’
	‘The current SWSA rules of governance (established in 2001) have minimal description of the waste functions of the organisation.....’
	‘.....coordinate the waste management activities of its members including: - introducing measures that lead to conformity of standards for waste minimisation, waste management and litter prevention and control between member councils investigating and advising on landfill disposal costs and charges in the region.....’
	‘As a regional authority.....important role.....SWSA.....planning for waste and recovery facilities in the future.....consent of the state government.....embedded in planning regulations.....establishing SWSA as a referral authority for all such facilities in the region’
	‘LGAT..... state government should provide adequate resources for waste management.....supports the removal of regulatory barriers to sustainable recycling favours phased implementation of improved standards of landfill management.....strongly opposes the introduction of a waste management disposal levy’
	‘STCA outlines its priorities as.....improved physical infrastructure.....enhanced economic development.....improved environmental performance.... improved inter-regional cooperation.’

Appendix 9	Data on the communication and knowledge sharing dimension in corporate reports
Derwent Valley Council (Derwent Valley Council 2011, p. 4)	‘We are committed to openness, communication, participation and building relationships to gain unity and find common ground on issues’
Hobart City Council (Hobart City Council 2010, p. 14)	‘Liaise with other Councils in information sharing and benchmarking process.’
Kingborough Council (Kingborough Council 2013, p. 3)	‘.....commitment to the Statewide (<i>sic</i>) Partnership Agreement on Communication and Consultation with the State Government.’
Southern Waste Strategy Authority (Blue Environment 2011, pp. ES (iii), 44, 58 & 66)	‘.....dissatisfaction with SWSA in its current operational guise.... deficiencies in the current strategic plan and delivery against planned objectives.....gaps in communication between SWSA and its member councils’
	‘The lack of good recordkeeping often means there is a lack of knowledge of the types of waste that may have been deposited in the landfill in the past.’
	‘There is a lack of communication between local government and the C&I sector on waste and recycling issues. Potential opportunities for waste minimisation and resource recovery should be explored through an ongoing collaborative approach.’
	‘A number of councils do not collect data on the amount of kerbside recyclables collected and/or do not require their contractors to provide such information to them. The supply of this data should be a standard contract provision.’
	‘.....coordinated communication and education programs.....information-sharing networks which build waste/recovery knowledge and capacity within member councils’
	‘There are gaps in recorded data in southern Tasmania, both on the amount and source of generation of waste and on the amount and type of materials recovered. Council contracts should address regular provision of this information by contractors; information could then be provided by councils to SWSA for recording in a regional database. While weighbridges will give the most accurate data by weight, a regime of regular volumetric surveys of landfills will improve on current data at small landfills where installation of weighbridges is not economically feasible at present. Additional data on the composition of domestic garbage could be gathered by a series of regional waste and recycling audits.’

Appendix 10	Data on the contract management dimension in the corporate reports
Clarence City Council (Clarence City Council 2013, p. 72)	‘Implement new 7 year contract for wheelie bin based Green Waste collection service.....Implement new 7 year contracts for the collection of Residual Waste and Recyclables.’
Derwent Valley Council (Derwent Valley Council 2011, p. 12)	‘Arrange a long-term waste disposal and waste transfer system for the municipality in conjunction with other southern councils.’
Southern Waste Solutions (Southern Waste Solutions 2012a, p. 8 & 29)	‘.....to enter into contracts provided that any contract that is entered into does not extend beyond the term of the Lease’
	‘The Owner Councils are to lease to the Authority the Land on the following terms.....for an initial term of fifty (50) years.....’
Southern Waste Solutions (Southern Waste Solutions 2012b, p. 4)	‘Negotiate commercially attractive long-term contracts to complement the life of the Copping site, and seek the site operator’s support to share any emerging economies of scale.’
Southern Waste Strategy Authority (Blue Environment 2011, pp. 18, 72 & 33)	‘Huon Valley Council provides the following waste services..... Waste from the kerbside garbage collection and transfer station skips is deposited at Copping landfill under a 20 year contract (expiring in 2020).’
	‘Discussions with the Copping authority indicated that they have a number of long term (20 year) contracts with users (especially councils and waste management contractors)review of the base fees only every 10 years.’
	‘.....recent initiatives undertaken by SWSA include the coordination of tendering for regional/sub- regional kerbside collection contracts on behalf of some member councils and a survey of community perceptions on waste.’
Glamorgan Spring Bay Council (Glamorgan Spring Bay Council 2013a, pp. 34, 53 & 74)	‘Compile a contract register to ensure a more streamlined approach to contract management across the organisation.’
	‘Administer external contracts in relation to major projects.’
	‘Council has four Waste Transfer Stations (WTS’s) in operation Manage relevant leases and contracts.’
Kingborough Council (Kingborough Council 2011, p. 9)	‘The top organisational or strategic risks are; Failure of Council to deliver expected infrastructure and services through poor and inconsistent management of large contracts.’ (Kingborough Council 2011) .
Tasman Council (Tasman Council 2013, p. 35 & 36)	‘Manage Council’s external contracts.....Manage refuse services in accordance with contracted requirements.’

Appendix 11	Data on the monitoring and management of network relationships dimension in the corporate reports
Hobart City Council (Hobart City Council 2010, p. 14 & 15)	‘Continue to provide representation on regional waste authority (<i>sic</i>) Management Committees and Board’
	‘Work in conjunction with the STCA and SWSA in regard to the development of waste management structures within Tasmania.....Monitor the progress of the Waste Advisory Committee (WAC), and its Local Government Representative(s), when put in place.’
Glenorchy City Council (Glenorchy City Council 2013a, p. 28)	‘Actively participate in peak local government bodies (LGAT & the STCA) to advance community priorities.’
Kingborough Council (Kingborough Council 2013, p. 3 & 18)	‘Develop network knowledge and planning capacity.....’ and ‘Actively participate in the Southern Tasmanian Councils Authority and support the development and implementation of regional strategies, including regional planning and development, physical infrastructure, economic development, environmental performanceActively support the Local Government Association of Tasmania’
Sorell Council (Sorell Council 2012b, p. 2)	‘Lack of leadership from Local Government to look of (<i>sic</i>) differing amalgamation models, e.g. resource sharing, mergers with like neighbouring Councils, shared services.....’
Southern Waste Strategy Authority (Blue Environment 2011, pp. 45, 66 & 70)	‘.....there were seen to be some advantages for incorporation of waste under the umbrella of the STCA.....main drivers for initial formation of SWSA were to maintain local government control of waste management and oppose the introduction of a state government waste levy..... expectations of SWSA’s role had changed over time, and that the past (and current) organisational ethos did not reflect their future aspirations for the organisation.’
	‘Additional topics that should be addressed by the charter include.....the roles and responsibilities of SWSA board members, the SWSA chairperson and the CEO.....a process for addressing disputes and providing mediation.....’
	‘.....some stakeholders indicated a level of dissatisfaction with DPIPWE’s lack of enforcement of waste regulations; there was a view that a lack of resources led to different application of legal requirements in some circumstances.....generators opting for cheap disposal options that undercut the financial viability of reputable operators in the industry.’
Tasman Council (Tasman Council 2011, p. 17)	‘Continue to be an active participant in the Southern Waste Management (<i>sic</i>) Authority’
Southern Midlands Council (Southern Midlands Council 2012, pp. 16, 32 & 33)	‘Continue to be an active participant in the Southern Waste Strategy (<i>sic</i>)’, ‘Identify and implement working relationships with the Councils in our sub region across a wide range of operational and support areas’ and ‘Continue to participate in State and Regional forums, including the Southern Tasmanian Councils Authority and LGAT.....’

Bibliography

Albrecht, M, Elbe, J, Elbe, S & Meyer, W 2014, 'Analyzing and evaluating regional governance networks: Three challenges for applications', *Evaluation*, vol. 20, no. 1, p. 58.

Alderman Damon Thomas 2014, *Letter of resignation of SWSA membership*, Hobart City Council, Tasmania, Australia, 12 May 2014.

ALGA 2012, *The Case for Change: Why Local Government Needs to Be in the Constitution*, Australian Local Government Association, Deakin, ACT,
<http://www.councilreferendum.com.au/site/misc/alga/downloads/COUNCIL_RESOURCES/ALGA_CaseForChange_WEB%20VERSION.pdf>.

Ali, R, Ali Asghar Anvary, R & Ali, H 2008, 'Designing a generic model for outsourcing process in public sector: Evidence of Iran', *Management Decision*, vol. 46, no. 4, pp. 521-538.

Ambika, Z, Amrik, SS & Carol, A 2008, 'Environmental management system adoption by government departments/agencies', *International Journal of Public Sector Management*, vol. 21, no. 5, pp. 525-539.

Amirkhanyan, AA 2010, 'Monitoring across sectors: Examining the effect of nonprofit and for-profit contractor ownership on performance monitoring in state and local contracts', *Public Administration Review*, vol. 70, no. 5, pp. 742-755.

Andon, P 2012, 'Accounting-related research in PPPs/PFIs: present contributions and future opportunities', *Accounting, Auditing & Accountability Journal*, vol. 25, no. 5, p. 876.

Andrew, SA 2009, 'Regional integration through contracting networks: An empirical analysis of institutional collection action framework', *Urban Affairs Review*, vol. 44, no. 3, pp. 378-402.

Andrews, R, Boyne, GA & Walker, RM 2006, 'Strategy content and organizational performance: An empirical analysis', *Public Administration Review*, vol. 66, no. 1, pp. 52-63.

Andrews, R & Brewer, GA 2013, 'Social capital, management capacity and public service performance', *Public Management Review*, vol. 15, no. 1, pp. 19-42.

Andrews, R & Entwistle, T 2010, 'Does cross-sectoral partnership deliver? An empirical exploration of public service effectiveness, efficiency, and equity', *Journal of Public Administration Research and Theory: J-PART*, vol. 20, no. 3, pp. 679-701.

—— 2013, 'Four faces of public service efficiency', *Public Management Review*, vol. 15, no. 2, pp. 246-264.

Arranz, N & Fdez de Arroyabe, JC 2012, 'Effect of formal contracts, relational norms and trust on performance of joint research and development projects', *British Journal of Management*, vol. 23, no. 4, p. 575.

Aulich, C 2011, 'It's not ownership that matters: It's publicness', *Policy Studies*, vol. 32, no. 3, pp. 199-213.

Aulich, C & Hein, J 2005, 'Whole-of-government approaches to outsourcing and market testing by the Commonwealth government', *Australian Journal of Public Administration*, vol. 64, no. 3, pp. 35-35.

Aulich, C, Sansom, G & McKinlay, P 2013, 'A fresh look at municipal consolidation in Australia', *Local Government Studies*, pp. 1-20.

Bae, J 2009, 'Institutional Choices for local service contracting and collaboration', *International Review of Public Administration*, vol. 14, no. 1, p. 27.

Bae, J & Feiock, RC 2012, 'Managing multiplexity: Coordinating multiple services at a regional level', *State & Local Government Review*, vol. 44, no. 2, p. 162.

Baird, K, Schoch, H & Chen, Q 2012, 'Performance management system effectiveness in Australian local government', *Pacific Accounting Review*, vol. 24, no. 2, pp. 161-185.

Bălan, G & Radu, GA 2012, 'Foundation and design of the informational system in local public administration', *Academic Research International*, vol. 2, no. 2, p. 454.

Ball, A 2005, 'Environmental accounting and change in UK local government', *Accounting, Auditing & Accountability Journal*, vol. 18, no. 3, pp. 346-373.

Ball, A & Bebbington, J 2008, 'Editorial: Accounting and reporting for sustainable development in public service organizations', *Public Money & Management*, vol. 28, no. 6, p. 323.

Ball, A, Broadbent, J & Jarvis, T 2006, 'Waste management, the challenges of the PFI and 'sustainability reporting'', *Business Strategy & the Environment (John Wiley & Sons, Inc)*, vol. 15, no. 4, pp. 258-274.

Ball, A, Broadbent, J & Moore, C 2002, 'Best value and the control of local government: Challenges and contradictions', *Public Money & Management*, vol. 22, no. 2, p. 9.

Ball, I 2012, 'New development: Transparency in the public sector', *Public Money & Management*, vol. 32, no. 1, p. 35.

Barton, AD 2006, 'Public sector accountability and commercial-in-confidence outsourcing contracts', *Accounting, Auditing & Accountability Journal*, vol. 19, no. 2, pp. 256-271.

Bazeley, P 2007, *Qualitative Data Analysis with NVivo*, SAGE, London.

BDA Group 2009, *The full cost of landfill disposal in Australia*, Department of the Environment, Water, Heritage and the Arts, ACT Australia, <<http://www.environment.gov.au/settlements/waste/publications/pubs/landfill-cost.pdf>>.

Beach, S 2009, 'Who or what decides how stakeholders are optimally engaged by governance networks delivering public outcomes?', paper presented to 13th International Research Society for Public Management Conference, Fredericksberg, <<http://eprints.qut.edu.au/>>.

Beach, S, Keast, R & Pickernell, D 2012, 'Unpacking the connections between network and stakeholder management and their application to road infrastructure networks in Queensland', *Public Management Review*, vol. 14, no. 5, pp. 609-629.

Bebbington, J, Brown, J & Frame, B 2007, 'Methods: Accounting technologies and sustainability assessment models', *Ecological Economics*, vol. 61, pp. 224-236.

Bebbington, J, Brown, J, Frame, B & Thomson, I 2007, 'Theorizing engagement: The potential of a critical dialogic approach', *Accounting, Auditing & Accountability Journal*, vol. 20, no. 3, p. 356.

Bebbington, J & Gray, R 1993, 'Corporate accountability and the physical environment: Social responsibility and accounting beyond profit', *Business Strategy & the Environment* (John Wiley & Sons, Inc), vol. 2, no. 2, p. 1.

Bebbington, J & Larrinaga-Gonzalez, C 2008, 'Carbon trading: Accounting and reporting issues', *European Accounting Review*, vol. 17, no. 4, pp. 697-717.

Bel, G, Dijkgraaf, E, Fageda, X & Gradus, R 2010, 'Similar problems, different solutions: Comparing refuse collection in the Netherlands and Spain', *Public Administration*, vol. 88, no. 2, pp. 479-495.

Bel, G & Fageda, X 2007, 'Why do local governments privatise public services? A survey of empirical studies', *Local Government Studies*, vol. 33, no. 4, pp. 517-534.

—— 2008, 'Reforming the local public sector: Economics and politics in privatization of water and solid waste', *Journal of Economic Policy reform*, vol. 11, no. 1, pp. 45-65.

—— 2009, 'Factors explaining local privatization: A meta-regression analysis', *Public Choice*, vol. 139, no. 1/2, pp. 105-119.

—— 2010, 'Partial privatisation in local services delivery: An empirical analysis of the choice of mixed firms', *Local Government Studies*, vol. 36, no. 1, pp. 129-149.

—— 2011, 'Big guys eat big cakes: Firm size and contracting in urban and rural areas', *International public management journal*, vol. 14, no. 1, pp. 4-26.

Bel, G, Fageda, X & Mur, M 2014, 'Does cooperation reduce service delivery costs? Evidence from residential solid waste services', *Journal of Public Administration Research & Theory*, vol. 24, no. 1, pp. 85-107.

Bel, G, Fageda, X & Warner, ME 2010, 'Is private production of public services cheaper than public production? A meta-regression analysis of solid waste and water services', *Journal of Policy Analysis and Management*, vol. 29, no. 3, pp. 553-577.

Bel, G & Warner, ME 2009, 'Managing competition in city services: The case of Barcelona', *Journal of Urban Affairs*, vol. 31, no. 5, p. 521.

—— 2013, 'Factors explaining inter-municipal cooperation in service delivery: A meta-regression analysis', paper presented to Public Management Research Association Conference, Madison, WI, 22 June 2013.

Bellringer, A, Ball, A & Russell, C 2011, 'Reasons for sustainability reporting by New Zealand local governments', *Sustainability Accounting, Management and Policy Journal*, vol. 2, no. 1, pp. 126-138.

Bengtsson, L & Dabhilkar, M 2009, 'Manufacturing outsourcing and its effect on plant performance—lessons for KIBS outsourcing', *Journal of Evolutionary Economics*, vol. 19, no. 2, pp. 231-257.

Benn, S & Jones, R 2009, 'The role of symbolic capital in stakeholder disputes: Decision-making concerning intractable wastes', *Journal of Environmental Management*, vol. 90, no. 4, pp. 1593-1604.

Benson, J & Littler, C 2002, 'Outsourcing the workforce reductions: An empirical study of Australian organizations', *Asia Pacific Business Review*, vol. 8, no. 3, p. 16.

Benton, EJ 2013, 'Local government collaboration: Considerations, issues, and prospects', *State and Local Government Review*, vol. 45, no. 4, pp. 220-223.

Berardo, R & Scholz, JT 2010, 'Self-organizing policy networks: Risk, partner selection, and cooperation in estuaries', *American Journal of Political Science*, vol. 54, no. 3, pp. 632-649.

Berg, BL 2004, *Qualitative research methods for the social sciences*, Pearson/A and B, Boston.

Berner, MM, Amos, JM & Morse, RS 2011, 'What constitutes effective citizen participation in local government? Views from city stakeholders', *Public Administration Quarterly*, vol. 35, no. 1, pp. 128-163.

Bertelli, AM & Smith, CR 2010, 'Relational contracting and network management', *Journal of Public Administration Research & Theory*, vol. 20, no. suppl_1, p. i21.

Bigdeli, AZ, Kamal, MM & de Cesare, S 2013, 'Electronic information sharing in local government authorities: Factors influencing the decision-making process', *International Journal of Information Management*, vol. 33, pp. 816-830.

Bisman, JE 2008, 'Australian public-sector outsourcing in the 'golden era': Cost savings evidence or anecdote?', *Australian Accounting Review*, vol. 18, no. 2, pp. 108-122.

Blue Environment 2011, *Waste Management 2020 and Beyond*, Southern Waste Strategy Authority, VIC, Australia,
<http://www.taswaste.com.au/sites/all/files/taswaste/documents/p140_swsa_review_-_final.pdf>.

——— 2013, *Waste generation and resource recovery in Australia*.

Reporting period 2010/11, P321, Department of Sustainability, Environment, Water, Population and Communities, VIC Australia,
<<http://www.environment.gov.au/system/files/resources/4b666638-1103-490e-bdef-480581a38d93/files/wgrra.pdf>>.

——— 2014, *Tasmanian Waste Review*, Waste Advisory Committee, TAS Australia,
<<http://epa.tas.gov.au/documents/tasmanian%20waste%20review%20-%20final%20report%20-%20march%202014.pdf>>.

Brackertz, N 2006, 'Relating physical and service performance in local government community facilities', *Facilities*, vol. 24, no. 7/8, pp. 280-291.

Brennan, NM & Solomon, J 2008, 'Corporate governance, accountability and mechanisms of accountability: An overview', *Accounting, Auditing & Accountability Journal*, vol. 21, no. 7, p. 885.

Brighton Council 2011, *Strategic Plan 2011–2021*, Old Beach, Tasmania, <http://www.brighton.tas.gov.au/images/stories/PDFs/Strategic_Plan/STRATEGIC_PLAN_2011-2021A.pdf>.

Broadbent, J & Laughlin, R 2009, 'Performance management systems: A conceptual model', *Management Accounting Research*, vol. 20, no. 4, pp. 283-295.

Brooks, C 2013, *Tasmanian recyclables could be heading for landfill*, ABC News, viewed 15 April 2015, <<http://www.abc.net.au/news/2013-02-11/tasmanian-recyclables-heading-for-landfill/4513140>>.

Brown, KN 2013, '"We the people," constitutional accountability, and outsourcing government', *Indiana Law Journal*, vol. 88, no. 4, pp. 1347-1403.

Brown, P & Benn, S 2009, 'Toxic risk and governance: The case of hexachlorobenzene', *Journal of Environmental Management*, vol. 90, no. 4, pp. 1557-1558.

Brown, TL, Potoski, M & Van Slyke, DM 2006, 'Managing public service contracts: Aligning values, institutions, and markets', *Public Administration Review*, vol. 66, no. 3, pp. 323-331.

Brown, TL, Potoski, M & Van Slyke, DM 2007, 'Trust and contract completeness in the public sector', *Local Government Studies*, vol. 33, no. 4, pp. 607-623.

Brown, TL, Potoski, M & Van Slyke, DM 2008, 'Changing modes of service delivery: How past choices structure future choices', *Environment and Planning C: Government and Policy*, vol. 26, no. 1, pp. 127-143.

Brown, TL, Potoski, M & Van Slyke, DM 2010, 'Contracting for complex products', *Journal of Public Administration Research & Theory*, vol. 20, no. suppl_1, pp. i41-i58.

Bryson, JM 2004, 'What to do when stakeholders matter', *Public Management Review*, vol. 6, no. 1, pp. 21-53.

Burritt, RL 2012, 'Environmental performance accountability: Planet, people, profits', *Accounting, Auditing & Accountability Journal*, vol. 25, no. 2, pp. 370-405.

Burritt, RL, Hahn, T & Schaltegger, S 2002, 'Towards a comprehensive framework for environmental management accounting—links between business actors and environmental management accounting tools', *Australian Accounting Review*, vol. 12, no. 27, p. 39.

Burritt, RL & Schaltegger, S 2012, 'Accounting for sustainability in production and supply chains', *British Accounting Review*, vol. 44, no. 4, pp. 278-278.

Burritt, RL & Welch, S 1997, 'Accountability for environmental performance of the Australian Commonwealth public sector', *Accounting, Auditing & Accountability Journal*, vol. 10, no. 4, p. 532.

Calabro, A & Torchia, M 2011, 'Conflicts of interest and governance mechanisms in Italian local public utilities', *International Journal of Public Administration*, vol. 34, no. 7, p. 447.

Carley, K 1993, 'Coding choices for textual analysis: A comparison of content analysis and map analysis', *Sociological Methodology*, vol. 23, no. Journal Article, pp. 75-126.

Carnegie, GD & Baxter, C 2006, 'Price setting for local government service delivery: An exploration of key issues', *Australian Journal of Public Administration*, vol. 65, no. 3, pp. 103-103.

Carr, JB & Hawkins, CV 2013, 'The costs of cooperation: What the research tells us about managing the risks of service collaborations in the US', *State & Local Government Review*, vol. 45, no. 4, p. 224.

Central Highlands Council 2012, *Annual Plan 2012–2013*, Bothwell, Tasmania, <http://centralhighlands.tas.gov.au/downloads/2.7/Annual_Plan_2013.pdf>.

Chalos, P & Sung, J 1998, 'Outsourcing decisions and managerial incentives', *Decision Sciences*, vol. 29, no. 4, p. 901.

Charmaz, K 2006, *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*, Sage Publications, London.

Christ, KL & Burritt, RL 2013, 'Environmental management accounting: The significance of contingent variables for adoption', *Journal of Cleaner Production*, vol. 41, pp. 163-173.

Clarence City Council 2010, *Strategic Plan 2010–2015*, Rosny Park, Tasmania, <http://www.ccc.tas.gov.au/webdata/resources/files/Strategic_Plan_2010_final.pdf>.

———2013, *Annual Plan 2013–2014*, Rosny Park, Tasmania, <<http://www.ccc.tas.gov.au/webdata/resources/files/annual-plan-2013-2014.pdf>>.

COAG 2012, *Review of capital city strategic planning systems*, ISBN 978-1-921706-29-5, Council of Australian Government Reform Council, <http://www.coagreformcouncil.gov.au/sites/default/files/files/reports/cities/review-2011/review_of_capital_city_strategic_planning_systems.pdf>.

Coase, RH 1937, 'Some notes on monopoly price', *The Review of Economic Studies*, no. 1, p. 17.

Cornut, F, Giroux, H & Langley, A 2012, 'The strategic plan as a genre', *Discourse & Communication*, vol. 6, no. 1, pp. 21-54.

Creswell, JW 1998, *Qualitative Inquiry and Research Design: Choosing among Five Traditions*, Sage Publications, Thousand Oaks, Calif.

Cristofoli, D, Ditillo, A, Liguori, M, Sicilia, M & Steccolini, I 2010, 'Do environmental and task characteristics matter in the control of externalized local public services? Unveiling the relevance of party characteristics and citizens' offstage voice', *Accounting, Auditing & Accountability Journal*, vol. 23, no. 3, pp. 350-372.

Cruz, NF & Marques, RC 2012, 'Mixed companies and local governance: No man can serve two masters', *Public Administration*, vol. 90, no. 3, pp. 737-758.

Cuadrado-Ballesteros, B, Garcaía-Sánchez, IM & Prado-Lorenzo, JM 2013, 'Modes of public services delivery: The case of Spanish local governments', *Lex Localis—Journal of Local Self-Government*, vol. 11, no. 2, pp. 119-137.

Das, TK & Teng, BS 2001, 'Trust, control, and risk in strategic alliances: An integrated framework', *Organization Studies*, vol. 22, no. 2, pp. 251-283.

Deegan, C 2013, 'The accountant will have a central role in saving the planet ... really? A reflection on “green accounting and green eyeshades twenty years later”', *Critical Perspectives on Accounting*, vol. 24, pp. 448-458.

Dekker, HC, Sakaguchi, J & Kawai, T 2013, 'Beyond the contract: Managing risk in supply chain relations', *Management Accounting Research*, vol. 24, pp. 122-139.

Delabbio, DJ & Zeemering, ES 2013, 'Public entrepreneurship and interlocal cooperation in county government', *State & Local Government Review*, vol. 45, no. 4, p. 255.

Denhardt, RB & Denhardt, JV 2000, 'The new public service: Serving rather than steering', *Public Administration Review*, vol. 60, no. 6, pp. 549-559.

Denzin, NK 1970, *The research act in sociology: A theoretical introduction to sociological methods*, Butterworths, London.

Derwent Valley Council 2011, *Strategic Plan 2011–2015*, New Norfolk, Tasmania, <http://www.derwentvalley.tas.gov.au/webdata/resources/files/DRAFT_Strategic_Plan_2011-2015.pdf>.

Desrieux, C, Chong, E & Saussier, S 2013, 'Putting all one's eggs in one basket: Relational contracts and the management of local public services', *Journal of Economic Behavior and Organization*, vol. 89, pp. 167-186.

Dijkgraaf, E & Gradus, RHJM 2007a, 'Collusion in the Dutch waste collection market', *Local Government Studies*, vol. 33, no. 4, pp. 573-588.

—— 2007b, 'Fair competition in the refuse collection market?', *Applied Economics Letters*, vol. 14, no. 10/12, pp. 701-704.

—— 2008a, 'Institutional developments in the Dutch waste-collection market', *Environment and Planning C: Government and Policy*, vol. 26, no. 1, pp. 110-126.

—— 2008b, 'Per-unit garbage charges', *The Journal of Economic Perspectives*, vol. 22, no. 2, pp. 243-244.

Doberstein, C 2013a, 'Metagovernance of urban governance networks in Canada: In pursuit of legitimacy and accountability', *Canadian Public Administration*, vol. 56, pp. 584-609.

—— 2013b, 'Metagovernance of urban governance networks in Canada: In pursuit of legitimacy and accountability', *Canadian Public Administration*, vol. 56, no. 4, pp. 584-609.

Dollery, BE 2010, 'Are there tensions between democracy and efficiency in local government? A conceptual note on the structural reform debate', *Urban Policy and Research*, vol. 28, no. 1, pp. 117-123.

Dollery, BE & Akimov, A 2008a, 'Are shared services a panacea for Australian local government? A critical note on Australian and international empirical evidence', *International Review of Public Administration*, vol. 12, no. 2, p. 89.

—— 2008b, 'A critical comment on the analysis of shared services in the Queensland local government association's size, shape and sustainability program', *Accounting, Accountability & Performance*, vol. 14, no. 2, pp. 29-44.

Dollery, BE, Akimov, A & Byrnes, J 2009, 'Shared services in Australian local government: Rationale, alternative models and empirical evidence', *Australian Journal of Public Administration*, vol. 68, no. 2, pp. 208-208.

Dollery, BE, Byrnes, J & Crase, L 2007, 'The infrastructure crisis in Australian local government: A proposed federal asset fund solution', *Australasian Journal of Regional Studies*, vol. 13, no. 1, pp. 3-19.

Dollery, BE & Grant, B 2009, 'Australian alternatives to local government consolidation', *Public Policy*, vol. 4, no. 2, pp. 87-103.

Dollery, BE, Grant, B & Akimov, A 2010, 'A typology of shared service provision in Australian local government', *Australian Geographer*, vol. 41, no. 2, pp. 217-231.

Dollery, BE, Hallam, G & Wallis, J 2008, 'Shared services in Australian local government: A case study of the Queensland local government association model', *Economic Papers*, vol. 27, no. 4, pp. 343-354.

Dollery, BE & Kelly, G 2012, *Inter-Council Cooperation and Financial Sustainability in NSW Local Government*, Independent report prepared for the United Service Union on the Draft Destination.

Dollery, BE, Kortt, M & Grant, B 2012, *Options for Rationalizing Local Government Structure: A Policy Agenda*, International Center for Public Policy (formerly the International Studies Program), Andrew Young School of Policy Studies, Georgia State University.

Dollery, BE & Manley, K 2007, 'A note on performance measurement in Victorian local government', *Accounting, Accountability & Performance*, vol. 13, no. 1, pp. 22-41.

Domberger, S & Piggott, J 1986, 'Privatization policies and public enterprise: a survey', *Economic Record*, vol. 62, no. 177, pp. 145-162.

Donaldson, T & Preston, LE 1995, 'The stakeholder theory of the corporation: Concepts, evidence, and implications', *The Academy of Management Review*, vol. 20, no. 1, pp. 65-91.

Dubnick, M 2005, 'Accountability and the promise of performance: In search of the mechanisms', *Public Performance & Management Review*, vol. 28, no. 3, pp. 376-417.

Dumay, J, Guthrie, J & Farneti, F 2010, 'Gri sustainability reporting guidelines for public and third sector organizations', *Public Management Review*, vol. 12, no. 4, pp. 531-548.

Durugbo, C & Riedel, JCKH 2013, 'Readiness assessment of collaborative networked organisations for integrated product and service delivery', *International Journal of Production Research*, vol. 51, no. 2, pp. 598-613.

Edhlund, BM 2011, *Nvivo 9 Essentials: Your Guide to the World's Most Powerful Qualitative Data Analysis Software*, Form & Kunskap AB, Stallarholmen, Sweden.

Environmental Management and Pollution Control (Waste Management) Regulations, 2010, Tasmania, Australia.

Environmental Management and Pollution Control Act, 1994, Tasmania, Australia, 29 November 2007,

<http://www.thelaw.tas.gov.au/tocview/index.w3p;cond=;doc_id=44%2B%2B1994%2BGS27%40EN%2B20150310110000%23GS27%40EN;histon=;prompt=;rec=;term=>>.

EPA Tasmania 2009, *Tasmanian Waste and Resource Management Strategy*, by Environmental Protection Authority, Department of Environment, Parks, Heritage and the Arts, <<http://epa.tas.gov.au/regulation/document?docid=631>>.

EPHC 2010a, *National Waste Policy: Less Waste, More Resources Implementation Plan* Environment Protection and Heritage Council, Australia,

<<http://www.scew.gov.au/publications/nwp/pubs/national-waste-policy-less-waste-more-resources-implementation-plan-july-2010.pdf>>.

—— 2010b, *National Waste Report 2010*, Australian Government: Department of the Environment, Water, Heritage and the Arts,

<<http://www.scew.gov.au/sites/www.scew.gov.au/files/resources/020c2577-eac9-0494-493c-d1ce2b4442e5/files/wastemgt-nat-waste-report-final-20-fullreport-201005-0.pdf>>.

Farneti, F & Guthrie, J 2009, 'Sustainability reporting by Australian public sector organisations: Why they report', *Accounting Forum*, vol. 33, pp. 89-98.

Feaver, D & Sheehy, B 2014, 'The shifting balance of power in the regulatory state: Structure, strategy, and the division of labour', *Journal of Law & Society*, vol. 41, no. 2, pp. 203-226.

Feiock, RC 2013, 'The institutional collective action framework', *The Policy Studies Journal*, vol. 41, no. 3, p. 397.

Feiock, RC, In Won, L & Hyung Jun, P 2012, 'Administrators' and elected officials' collaboration networks: Selecting partners to reduce risk in economic development', *Public Administration Review*, vol. 72, pp. S58-S68.

Feldman, Y & Perez, O 2012, 'Motivating environmental action in a pluralistic regulatory environment: An experimental study of framing, crowding out, and institutional effects in the context of recycling policies', *Law & Society Review*, vol. 46, no. 2, pp. 405-442.

Flack, T & Ryan, C 2005, 'Financial reporting by Australian nonprofit organisations: Dilemmas posed by government funders', *Australian Journal of Public Administration*, vol. 64, no. 3, pp. 69-77.

Folz, DH 2004, 'Service quality and benchmarking the performance of municipal services', *Public Administration Review*, vol. 64, no. 2, pp. 209-220.

Forrer, J, Kee, JE, Newcomer, KE & Boyer, E 2010, 'Public-private partnerships and the public accountability question', *Public Administration Review*, vol. 70, no. 3, pp. 475-484.

Frooman, J 1999, 'Stakeholder influence strategies', *Academy of Management. The Academy of Management Review*, vol. 24, no. 2, pp. 191-205.

Fukushima, M, Ono, E, Wu, B, Ibe, H, Wakai, K, Sugiyama, E, Abe, H, Kitagawa, K, Tsuruga, S & Shimura, K 2010, 'Study on dechlorination technology for municipal waste plastics containing polyvinyl chloride and polyethylene terephthalate', *Journal of Material Cycles and Waste Management*, vol. 12, no. 2, pp. 108-122.

Gains, F & Stoker, G 2009, 'Delivering “public value”: Implications for accountability and legitimacy', *Parliamentary Affairs*, vol. 62, no. 3, pp. 438-455.

Garrone, P, Grilli, L & Rousseau, X 2013, 'Management discretion and political interference in municipal enterprises: Evidence from Italian utilities', *Local Government Studies*, vol. 39, no. 4, p. 514.

Gerber, ER, Henry, AD & Lubell, M 2013, 'Political homophily and collaboration in regional planning networks', *American Journal of Political Science*, vol. 57, no. 3, pp. 598-610.

Ghoshal, S & Moran, P 1996, 'Bad for practice: A critique of the transaction cost theory', *The Academy of Management Review*, vol. 21, no. 1, pp. 13-47.

Gibbs, G 2002, *Qualitative Data Analysis: Explorations with NVivo*, Open University, Berkshire [Eng.].

Gibson, K 2012, 'Stakeholders and sustainability: An evolving theory', *Journal of Business Ethics*, vol. 109, no. 1, pp. 15-25.

Girth, AM 2014, 'A closer look at contract accountability: Exploring the determinants of sanctions for unsatisfactory contract performance', *Journal of Public Administration Research & Theory*, vol. 24, no. 2, pp. 317-348.

Girth, AM, Hefetz, A, Johnston, JM & Warner, ME 2012, 'Outsourcing public service delivery: Management responses in noncompetitive markets', *Public Administration Review*, vol. 72, no. 6, pp. 887-900.

Glamorgan Spring Bay Council 2013a, *Annual Plan & Budget Estimates 2013–2014*, Swansea, Tasmania,
<<http://www.gsbc.tas.gov.au/sitedata/unity/resources/files/Annual%20Plan%20and%20Budget%20Estimates%202013-2014.pdf>>.

—— 2013b, *Community Strategic Plan July 2013*, Swansea, Tasmania,
<http://www.gsbc.tas.gov.au/sitedata/unity/resources/files/GSB010_Community%20Strategic%20Plan_P5.pdf>.

Glenorchy City Council 2013a, *Annual Plan 2013–2014 to 2015–2016*, Glenorchy, Tasmania,
<http://www.gcc.tas.gov.au/content/upload/2013_14___2015_16_Annual_Plan_4651.pdf>.

—— 2013b, *Strategic Plan 2013–2018*, Glenorchy, Tasmania,
<http://www.gcc.tas.gov.au/content/upload/Glenorchy_City_Council_Strategic_Plan_2013_18__Interim__final_4312.pdf>.

Godfrey, L, Scott, D & Trois, C 2013, 'Caught between the global economy and local bureaucracy: The barriers to good waste management practice in South Africa', *Waste Management & Research: The Journal of the International Solid Wastes & Public Cleansing Association, ISWA*, vol. 31, no. 3, p. 295.

Goliday, AM 2012, 'Governance: Best practices for addressing complex social problems within the network governance construct', *Journal of Global Intelligence & Policy*, vol. 5, no. 9, pp. 30-44.

Grant, B, Dollery, BE & van der Westhuizen, G 2012, 'Locally constructed regionalism: The city of greater Geraldton, Western Australia', *Public Policy*, vol. 7, no. 1, pp. 79-96.

Grant, B & Fisher, J 2011, 'Public value: Positive ethics for Australian local government', *Journal of Economic & Social Policy*, vol. 14, no. 2, pp. [118]-[138].

Gray, R 1992, 'Accounting and environmentalism: An exploration of the challenge of gently accounting for accountability, transparency and sustainability', *Accounting, Organizations & Society*, vol. 17, no. 5, pp. 399-425.

—— 2002, 'The social accounting project and accounting organizations and society: Privileging engagement, imaginings, new accountings and pragmatism over critique?', *Accounting, Organizations & Society*, vol. 27, no. 7, pp. 687-708.

—— 2005, 'Taking a long view on what we now know about social and environmental accountability and reporting', *Electronic Journal of Radical Organisation Theory*, vol. 9, no. 1, pp. [6-36].

—— 2010, 'Is accounting for sustainability actually accounting for sustainability...and how would we know? An exploration of narratives of organisations and the planet', *Accounting, Organizations and Society*, vol. 35, pp. 47-62.

—— 2013, 'Back to basics: What do we mean by environmental (and social) accounting and what is it for?—A reaction to Thornton', *Critical Perspectives on Accounting*, vol. 24, pp. 459-468.

Gray, R, Brennan, A & Malpas, J 2013, 'New accounts: Towards a reframing of social accounting', *Accounting Forum*.

Gray, R, Dillard, J & Spence, C 2009, 'Social accounting research as if the world matters', *Public Management Review*, vol. 11, no. 5, pp. 545-573.

Greve, C 2001, 'New avenues for contracting out and implications for a theoretical framework', *Public Performance & Management Review*, vol. 24, no. 3, pp. 270-284.

Grossman, SJ & Hart, OD 1986, 'The costs and benefits of ownership: A theory of vertical and lateral integration', *Journal of Political Economy*, vol. 94, no. 4, pp. 691-719.

Gruber, M & Bank, M 2009, 'The potential of PPPs in natural hazard management in Austria', *The Business Review, Cambridge*, vol. 13, no. 2, p. 236.

Hart, O & Moore, J 1988, 'Incomplete contracts and renegotiation', *Econometrica*, vol. 56, no. 4, p. 755.

—— 1999, 'Foundations of incomplete contracts', *The Review of Economic Studies*, vol. 66, no. 1, pp. 115-138.

—— 2008, 'Contracts as reference points', *Quarterly Journal of Economics*, vol. 123, no. 1, pp. 1-48.

Hassanain, MA & Al-Saadi, S 2005, 'A framework model for outsourcing asset management services', *Facilities*, vol. 23, no. 1/2, pp. 73-81.

Haynes, G & Lynch, S 2013, 'Local partnerships: Blowing in the wind of national policy changes', *British Educational Research Journal*, vol. 39, no. 3, pp. 425-446.

Hefetz, A & Warner, ME 2007, 'Beyond the market versus planning dichotomy: Understanding privatisation and its reverse in US cities', *Local Government Studies*, vol. 33, no. 4, pp. 555-572.

—— 2012, 'Contracting or public delivery? The importance of service, market, and management characteristics', *Journal of Public Administration Research and Theory*, vol. 22, no. 2, p. 289.

Hefetz, A, Warner, ME & Vigoda-Gadot, E 2012, 'Privatization and intermunicipal contracting: The US local government experience 1992–2007', *Environment and Planning C: Government and Policy*, vol. 30, no. 4, pp. 675-692.

Heinrich, CJ, Lynn, LE & Milward, HB 2010, 'A state of agents? Sharpening the debate and evidence over the extent and impact of the transformation of governance', *Journal of Public Administration Research & Theory*, vol. 20, no. suppl_1, p. i3.

Heiskanen, A, Newman, M & Eklin, M 2008, 'Control, trust, power, and the dynamics of information system outsourcing relationships: A process study of contractual software development', *Journal of Strategic Information Systems*, vol. 17, no. 4, pp. 268-286.

Henry, AD & Dietz, T 2012, 'Understanding environmental cognition', *Organization & Environment*, vol. 25, no. 3, pp. 238-258.

Hillier, N, Gennissen, J, Pickering, B & Smolenski, R 2009, 'Our battle with hexachlorobenzene: Citizen perspectives on toxic waste in Botany', *Journal of Environmental Management*, vol. 90, no. 4, pp. 1605-1612.

Hilvert, C & Swindell, D 2013, 'Collaborative service delivery: What every local government manager should know', *State and Local Government Review*, vol. 45, no. 4, pp. 240-254.

Hobart City Council 2010, *Waste Management Strategy 2010–2015*, Hobart, Tasmania, <<http://www.hobartcity.com.au/files/ef211111-6f88-4126-9eb7-9ee200e1b686/>>.

—— 2013, *Annual plan for the 2013–2014 financial year*, Hobart, Tasmania, <http://www.hobartcity.com.au/Publications/Strategies_and_Plans/Annual_Plan_2013_-_2014>.

Huber, TL, Fischer, TA, Dibbern, J & Hirschheim, R 2013, 'A process model of complementarity and substitution of contractual and relational governance in IS outsourcing', *Journal of Management Information Systems*, vol. 30, no. 3, pp. 81-114.

Hukkinen, J 1995, 'Corporatism as an impediment to ecological sustenance: The case of Finnish waste management', *Ecological Economics*, vol. 15, no. 1, pp. 59-75.

Huon Valley Council 2010, *Strategic Plan 2010–2015*, Huonville, Tasmania, <<http://www.huonvalley.tas.gov.au/page.aspx?u=797>>.

Hyder Consulting 2011, *Role and performance of local government: Waste and recycling related data and information*, Department of Sustainability, Environment, Water, Population and Communities, NSW Australia, <www.environment.gov.au/wastepolicy/.../pubs/local-government.docx>.

Interviewee 1 - *General Manager; Local Government Authority A*, Hobart, Tasmania, 28 May 2015, Transcribed Interview.

Interviewee 2 - *Councillor; Local Government Authority B*, Hobart, Tasmania, 29 May 2015, Transcribed Interview.

Interviewee 3 - *Community Leader; Tasmania*, Hobart, Tasmania, 2 June 2015, Transcribed Interview.

Interviewee 4 - *Community Leader; Local Government Authority C*, Hobart, Tasmania, 4 June 2015, Transcribed Interview.

Interviewee 5 - *Senior Manager; Local Government Authority D*, Hobart, Tasmania, 11 June 2015, Transcribed Interview.

Interviewee 6 - *Senior Manager; Waste Service Provider A*, Hobart, Tasmania, 12 June 2015, Transcribed Interview.

Interviewee 7 - *General Manager; Waste Service Provider B*, Hobart, Tasmania, 16 June 2015, Transcribed Interview.

Interviewee 8 - *Senior Manager; Tasmanian Government*, Hobart, Tasmania, 25 June 2015, Transcribed Interview.

Interviewee 9 - *Senior Manager; Local Government Authority E*, Hobart, Tasmania, 26 June 2015, Transcribed Interview.

Interviewee 10 - *General Manager; Waste Service Provider C*, Hobart, Tasmania, 20 July 2015, Transcribed Interview.

Interviewee 11 - *Senior Manager; Local Government Authority E*, Hobart, Tasmania, 21 July 2015, Transcribed Interview.

Interviewee 12 - *Senior Manager; Local Government Authority F*, Hobart, Tasmania, 21 August 2015, Transcribed Interview.

Jensen, MC & Meckling, WH 1976, 'Theory of the firm: Managerial behavior, agency costs and ownership structure', *Journal of financial economics*, vol. 3, no. 4, pp. 305-360.

Jensen, PH & Stonecash, RE 2005, 'Incentives and the efficiency of public sector-outsourcing contracts', *Journal of Economic Surveys*, vol. 19, no. 5, pp. 767-787.

Ji, S & Deegan, C 2011, 'Accounting for contaminated sites: How transparent are Australian companies?', *Australian Accounting Review*, vol. 21, no. 2, p. 131.

Jick, TD 1979, 'Mixing qualitative and quantitative methods: Triangulation in action', *Administrative science quarterly*, vol. 24, no. 4, pp. 602-611.

Johnstone, D 2002, 'Public sector outsourcing as an exchange option', *Abacus*, vol. 38, no. 2, pp. 153-153.

Kakabadse, A & Kakabadse, N 2003, 'Outsourcing best practice: Transformational and transactional considerations', *Knowledge and Process Management*, vol. 10, no. 1, pp. 60-71.

Kang, M, Wu, X, Hong, P & Park, Y 2012, 'Aligning organizational control practices with competitive outsourcing performance', *Journal of Business Research*, vol. 65, no. 8, p. 1195.

Keast, R, Mandell, M & Brown, K 2006, 'Mixing state, market and network governance modes: The role of government in "crowded" policy domains', *International Journal of Organization Theory & Behavior* (PrAcademics Press), vol. 9, no. 1, pp. 27-50.

Keeler, RL 2013, 'Managing outsourced administrative discretion', *State and Local Government Review*, vol. 45, no. 3, pp. 183-188.

Kelly, M 2000, 'Insure against administrative nightmares', *The British Journal of Administrative Management*, no. 21, p. 16.

Keskitalo, ECH & Liljenfeldt, J 2012, 'Working with sustainability: Experiences of sustainability processes in Swedish municipalities', *Natural Resources Forum*, vol. 36, no. 1, pp. 16-27.

Kettl, DF 2000, 'The Transformation of Governance: Globalization, Devolution, and the Role of Government', no. 6, p. 488, via edsjsr (EBSCOhost),
<<https://login.ezproxy.utas.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.977432&site=eds-live>>.

Kingborough Council 2011, *Risk Management Strategy*, Kingston, Tasmania,
<http://www.kingborough.tas.gov.au/webdata/resources/files/Risk_Management_Strategy_Jan_2011_A_FINAL.pdf>.

—— 2013, *Strategic Delivery Plan 2010–2015*, Kingston, Tasmania,
<http://www.kingborough.tas.gov.au/webdata/resources/files/Strategic_Delivery_Plan.pdf>.

Kloot, L 2001, 'Using local government corporate plans in Victoria', *Australian Journal of Public Administration*, vol. 60, no. 4, pp. 17-29.

—— 2006, 'Budget reporting in local government: Problem or solution?', *Australian Accounting Review*, vol. 16, no. 40, pp. 72-81.

Kloot, L & Martin, JF 2001, 'Local government accountability : explaining differences', *Accounting, Accountability & Performance*, vol. 7, no. 1, pp. 51-74.

—— 2002, 'Transforming Australian local government: insights into leading management practices', *Accounting, Accountability & Performance*, vol. 8, no. 2, pp. 1-22.

—— 2007, 'Public sector change, organisational culture and financial information: A study of local government', *Australian Journal of Public Administration*, vol. 66, no. 4, pp. 485-497.

Kluvers, R & Tippet, J 2010, 'Mechanisms of accountability in local government: An exploratory study', *International Journal of Business and Management*, vol. 5, no. 7, p. 46.

——— 2011, 'The views of councillors and managers on accountability in local government: An empirical study in Australia', *International Journal of Management*, vol. 28, no. 2, p. 519.

——— 2012, 'The NPM: The Trojan horse in accountability', *International Journal of Business and Management*, vol. 7, no. 3, p. 3.

Knussen, C, Yule, F, MacKenzie, J & Wells, M 2004, 'An analysis of intentions to recycle household waste: The roles of past behaviour, perceived habit, and perceived lack of facilities', *Journal of Environmental Psychology*, vol. 24, no. 2, pp. 237-246.

Kornberger, M & Clegg, S 2011, 'Strategy as performative practice: The case of Sydney 2030', *Strategic Organization*, vol. 9, no. 2, pp. 136-162.

Lacity, MC, Hirschheim, R & Willcocks, L 1994, 'Realizing outsourcing expectations', *Information Systems Management*, vol. 11, no. 4, p. 7.

Lacity, MC & Khan, SA 2009, 'A review of the IT outsourcing literature: Insights for practice', *The journal of strategic information systems*, vol. 18, no. 3, pp. 130-146.

Lacity, MC & Willcocks, LP 2011, 'Beyond transaction cost economics: Towards an endogenous theory of information technology outsourcing', *The journal of strategic information systems*, vol. 20, no. 2, pp. 139-157.

Lair, CD 2012, 'Outsourcing and the contracting of responsibility', *Sociological Inquiry*, vol. 82, no. 4, pp. 557-577.

Laking, R & Norman, R 2007, 'Imitation and inspiration in public sector reform: Lessons from Commonwealth experiences', *International Review of Administrative Sciences*, vol. 73, no. 4, pp. 517-530.

Lamothe, M & Lamothe, S 2012, 'To trust or not to trust? What matters in local government-vendor relationships?', *Journal of Public Administration Research & Theory*, vol. 22, no. 4, p. 867.

Lamothe, S & Lamothe, M 2013, 'Understanding the differences between vendor types in local governance', *American Review of Public Administration*, vol. 43, no. 6, p. 709.

Lamothe, S, Lamothe, M & Feiock, RC 2008, 'Examining local government service delivery arrangements over time', *Urban Affairs Review*, vol. 44, no. 1, pp. 27-56.

Lane, R 2011, 'The waste commons in an emerging resource recovery waste regime: Contesting property and value in Melbourne's hard rubbish collections', *Geographical Research*, vol. 49, no. 4, pp. 395-407.

Lavee, D 2007, 'Is municipal solid waste recycling economically efficient?', *Environmental Management*, vol. 40, no. 6, pp. 926-943.

Lee, I, Feiock, RC & Lee, Y 2012, 'Competitors and cooperators: A micro-level analysis of regional economic development collaboration networks', *Public Administration Review*, vol. 72, no. 2, pp. 253-262.

Lee, J & Fisher, G 2007, 'The perceived usefulness and use of performance information in the Australian public sector', *Accounting, Accountability & Performance*, vol. 13, no. 1, pp. 42-73.

LeRoux, K, Brandenburger, PW & Pandey, SK 2010, 'Interlocal service cooperation in U.S. cities: A social network explanation', *Public Administration Review*, vol. 70, no. 2, p. 268.

LeRoux, K & Carr, JB 2010, 'Prospects for centralizing services in urban county: Evidence from eight self-organized networks of Local Public Services', *Journal of Urban Affairs*, vol. 32, no. 4, pp. 449-470.

LeRoux, K & Pandey, SK 2011, 'City managers, career incentives, and municipal service decisions: The effects of managerial progressive ambition on interlocal service delivery', *Public Administration Review*, vol. 71, no. 4, p. 627.

Lester, TW & Reckhow, S 2013, 'Network governance and regional equity: Shared agendas or problematic partners?', *Planning Theory*, vol. 12, no. 2, p. 115.

Levin, J & Tadelis, S 2010, 'Contracting for government services: Theory and evidence from U.S. cities', *Journal of Industrial Economics*, vol. 58, no. 3, p. 507.

Lodhia, S, Jacobs, K & Park, YJ 2012, 'Driving Public Sector Environmental Reporting', *Public Management Review*, vol. 14, no. 5, pp. 631-647.

LGaPM Council 2009, *National Planning Systems Principles*, by LGPMC, Local Government and Planning Ministers' Council,
<<http://www.lgpmcouncil.gov.au/publications/files/National%20Planning%20Systems%20Principles.pdf>>.

Lindberg, SI 2013, 'Mapping accountability: Core concept and subtypes', *International Review of Administrative Sciences*, vol. 79, no. 2, p. 202.

Lloyd-Smith, M 2009, 'Information, power and environmental justice in Botany: The role of community information systems', *Journal of Environmental Management*, vol. 90, no. 4, pp. 1628-1635.

Local Government Act, 1993, 95, 23 December 1993,
<http://www.thelaw.tas.gov.au/tocview/index.w3p;cond=;doc_id=95%2B%2B1993%2BGS66%40EN%2B20140207000000;histon=;prompt=;rec=;term=>>.

Local Government Board 2012, *Report on a Review of Councillor Numbers* Tasmanian Government, Hobart, Tasmania,
<http://www.dpac.tas.gov.au/__data/assets/pdf_file/0009/168714/LGB_Final_Report_PDF_Nov_2012.pdf>.

Longo, F & Barbieri, D 2013, 'Using relational and transactional MCSs to manage the delivery of outsourced public services: Evidence from twelve cases in the USA', *Financial Accountability & Management*, vol. 29, no. 1, pp. 50-73.

Loughlin, DH & Barlaz, MA 2006, 'Policies for strengthening markets for recyclables: A worldwide perspective', *Critical Reviews in Environmental Science and Technology*, vol. 36, no. 4, pp. 287-326.

Lourdes, T, Vicente, P & Caridad, M 2012, 'Using non-mandatory performance measures in local governments', *Baltic Journal of Management*, vol. 7, no. 4, p. 416.

Lubell, M, Feiock, RC & de la Cruz, EER 2009, 'Local institutions and the politics of urban growth', *American Journal of Political Science*, vol. 53, no. 3, pp. 649-665.

Mandell, M & Keast, R 2007, 'Evaluating network arrangements: Toward revised performance measures', *Public Performance & Management Review*, vol. 30, no. 4, pp. 574-597.

Manetti, G 2011, 'The quality of stakeholder engagement in sustainability reporting: Empirical evidence and critical points', *Corporate Social Responsibility and Environmental Management*, vol. 18, no. 2, pp. 110-122.

Manetti, G & Toccafondi, S 2012, 'The role of stakeholders in sustainability reporting assurance', *Journal of Business Ethics*, vol. 107, no. 3, pp. 363-377.

May, P & Knight, MJ 1999, 'Regional waste minimisation and management in New South Wales', *Australian Civil Engineering Transactions*, vol. 41, pp. 47-52.

McIvor, R 2008, 'What is the right outsourcing strategy for your process?', *European management journal*, vol. 26, no. 1, pp. 24-34.

McIvor, R, Humphreys, P, McKittrick, A & Wall, T 2009, 'Performance management and the outsourcing process', *International Journal of Operations & Production Management*, vol. 29, no. 10, p. 1025.

McKinlay, P 2011, 'Reconceptualising shared services', *Commonwealth Journal of Local Governance*, no. 8/9: May-November 2011.

Measham, TG, Preston, BL, Smith, TF, Brooke, C, Gorddard, R, Withycombe, G & Morrison, C 2011, 'Adapting to climate change through local municipal planning: Barriers and challenges', *Mitigation and Adaptation Strategies for Global Change*, vol. 16, no. 8, pp. 889-909.

Melenberg, B, Gradus, RHJM & Dijkgraaf, E 2003, 'Contracting out refuse collection', *Empirical Economics*, vol. 28, no. 3, pp. 553-570.

Merickova, BM & Nemec, J 2013, 'Factors determining the success of contracting local public services: Waste collection and waste disposal, management of cemeteries in Slovakia', *Lex Localis - Journal of Local Self-Government*, vol. 11, no. 3, pp. 375-385.

Michels, A 2011, 'Innovations in democratic governance: How does citizen participation contribute to a better democracy?', *International Review of Administrative Sciences*, vol. 77, no. 2, pp. 275-293.

Miley, F & Read, A 2000, 'Environmental reporting: Thinking local', *Australian CPA*, vol. 70, no. 3, pp. 40-42.

Millar, H 2013, 'Comparing accountability relationships between governments and non-state actors in Canadian and European international development policy', *Canadian Public Administration*, vol. 56, no. 2, pp. 252-269.

Miller, A 2015, *Direct Tas-Asia Service on Hold*, Farmonline, viewed 15 April 2015, <<http://www.stockandland.com.au/news/agriculture/general/news/direct-tasasia-service-on-hold/2728194.aspx>>.

Miller, GJ 2005, 'The political evolution of principal-agent models', *Annual Review of Political Science*, vol. 8, no. 1, pp. 203-225.

Minkoff, SL 2013, 'From competition to cooperation: A dyadic approach to interlocal developmental agreements', *American Politics Research*, vol. 41, no. 2, p. 261.

Mishler, EG 1990, 'Validation in inquiry-guided research: The role of exemplars in narrative studies', *Harvard Educational Review*, vol. 60, no. 4, p. 415.

Mitchell, RK, Agle, BR & Wood, DJ 1997, 'Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts', *Academy of Management. The Academy of Management Review*, vol. 22, no. 4, pp. 853-886.

Mohr, JJ, Sengupta, S & Slater, SF 2011, 'Mapping the outsourcing landscape', *Journal of Business Strategy*, vol. 32, no. 1, pp. 42-50.

Mohr, R, Deller, SC & Halstead, JM 2010, 'Alternative methods of service delivery in small and rural municipalities', *Public Administration Review*, vol. 70, no. 6, pp. 894-905.

Moll, J & Hoque, Z 2008, 'New organizational forms and accounting innovations: The specifier/provider model in the Australian public sector', *Journal of Accounting & Organizational Change*, vol. 4, no. 3, pp. 243-269.

Mosher, R & Mainquist, D 2011, 'The outsourcing relationship', *The Internal Auditor*, vol. 68, no. 3, p. 35.

Moynihan, DP 2006, 'Managing for results in state government: Evaluating a decade of reform', *Public Administration Review*, vol. 66, no. 1, pp. 77-89.

MRA Consulting Group 2015, *Tasmanian Waste Levy Benefit Study*, Southern Waste Strategy Authority, NSW Australia,
<<http://epa.tas.gov.au/documents/tasmanian%20waste%20levy%20benefit%20study.pdf>>.

Nassreddine, G & Anis, J 2012, 'Stakeholder theory, corporate governance, and cognitive mapping techniques', *Researchers World*, vol. 3, no. 2 Part 2, pp. 50-61.

Neuman, WL 2000, *Social Research Methods: Qualitative and Quantitative Approaches*, 4th edn, Pearson, Boston, [Mass.].

Niskanen, WA 1971, *Bureaucracy and Representative Government*, Chicago: Aldine-Atherton, 1971.

—— 1972, 'Toward more efficient fiscal institutions', *National Tax Journal*, vol. 25, no. 3, pp. 343-347.

North, DC 1990, *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge.

Okuda, I & Thomson, VE 2007, 'Regionalization of municipal solid waste management in Japan: Balancing the proximity principle with economic efficiency', *Environmental Management*, vol. 40, no. 1, pp. 12-19.

Osborne, D & Gaebler, T 1993, *Reinventing Government : How the Entrepreneurial Spirit Is Transforming the Public Sector/David Osborne and Ted Gaebler*, New York: Penguin, c1993.

Ostrom, V 1972, 'Theory of public policy', *Policy Studies Journal*, vol. 1, no. 1, pp. 11-14.

Parsons, S & Kriwoken, LK 2010, 'Report: Maximizing recycling participation to reduce waste to landfill: A study of small to medium-sized enterprises in Hobart, Tasmania, Australia', *Waste Management & Research*, vol. 28, no. 5, pp. 472-477.

Patton, MQ 2002, *Qualitative Research and Evaluation Methods*, Sage Publications, Thousand Oaks, Calif.

Perlman, BJ 2013, 'The ins and outs of outsourcing', *State & Local Government Review*, vol. 45, no. 3, p. 180.

Pickin, J 2008, 'Unit pricing of household garbage in Melbourne: Improving welfare, reducing garbage, or neither?', *Waste Management & Research*, vol. 26, no. 6, pp. 508-514.

Poppo, L & Zenger, T 2002, 'Do formal contracts and relational governance function as substitutes or complements?', *Strategic Management Journal*, vol. 23, no. 8, pp. 707-725.

Potts, J 2009, 'The innovation deficit in public services: The curious problem of too much efficiency and not enough waste and failure', *Innovation: Management Policy and Practice*, vol. 11, no. 1, pp. 34-43.

Public Governance, Performance and Accountability Act, 2013, Australia, 1 July 2014, <http://www.comlaw.gov.au/Details/C2014C00317/Html/Text#_Toc392076032>.

Purse, K 2009, 'Outsourcing myths and workers' compensation claims administration', *The Australian Journal of Public Administration*, vol. 68, pp. 446-458.

Qian, W & Burritt, RL 2007, 'Environmental accounting for waste management: A study of local governments in Australia', *The Environmentalist*, vol. 27, no. 1, pp. 143-154.

—— 2009, 'Contingency perspectives on environmental accounting: An exploratory study of local government', *Accounting, Accountability & Performance*, vol. 15, no. 2, pp. 39-70.

Qian, W, Burritt, RL & Monroe, G 2011, 'Environmental management accounting in local government', *Accounting, Auditing & Accountability Journal*, vol. 24, no. 1, pp. 93-128.

Quiggin, J 1994, 'The fiscal gains from contracting out: Transfers or efficiency improvements', *Australian Economic Review*, vol. 27, no. 3, pp. 97-102.

—— 1996, 'Private sector involvement in infrastructure projects', *The Australian Economic Review*, vol. 29, no. 1, pp. 51-64.

Quinn, JB 1999, 'Strategic outsourcing: Leveraging knowledge capabilities.', *Sloan Management Review*, vol. 40, no. 4, pp. 9-21.

—— 2000, 'Outsourcing innovation: The new engine of growth', *Sloan management review*, vol. 41, no. 4, pp. 13-28.

Quinn, JB & Hilmer, FG 1994, 'Strategic outsourcing', *Sloan Management Review*, vol. 35, no. 4, pp. 43-55.

Rae, I & Brown, P 2009, 'Managing the intractable: Communicative structures for management of hexachlorobenzene and other scheduled wastes', *Journal of Environmental Management*, vol. 90, no. 4, pp. 1583-1592.

Ragin, CC 1992, 'Introduction: Cases of "What Is a case?"', in CC Ragin & HS Becker (eds), *What is a case?*, Cambridge University Press, Cambridge, pp. 1-18.

Rai, A, Keil, M, Hornyak, R & Wüllenweber, K 2012, 'Hybrid relational-contractual governance for business process outsourcing', *Journal of Management Information Systems*, vol. 29, no. 2, p. 213.

Reed, MS, Graves, A, Dandy, N, Posthumus, H, Hubacek, K, Morris, J, Prell, C, Quinn, CH & Stringer, LC 2009, 'Who's in and why? A typology of stakeholder analysis methods for natural resource management', *Journal of Environmental Management*, vol. 90, no. 5, pp. 1933-1949.

Reid, M 2012, 'Managing central-local government relationships: The case of New Zealand', *Commonwealth Journal of Local Governance*, vol. 11, pp. 3-32.

Richards, L 1999, *Using NVivo in Qualitative Research*, SAGE, London.

Riessman, CK 2008, *Narrative Methods for the Human Sciences*, SAGE Publications, Los Angeles.

Roberts, J & Scapens, R 1985, 'Accounting systems and systems of accountability -- understanding accounting practices in their organisational contexts', *Accounting, Organizations & Society*, vol. 10, no. 4, pp. 443-456.

Robertson, CJ, Lamin, A & Livanis, G 2010, 'Stakeholder perceptions of offshoring and outsourcing: The role of embedded issues', *Journal of Business Ethics*, vol. 95, no. 2, pp. 167-189.

Rodrigues, M, Tavares, AF & Araújo, JF 2012, 'Municipal service delivery: The role of transaction costs in the choice between alternative governance mechanisms', *Local Government Studies*, vol. 38, no. 5, p. 615.

Rosenberg Hansen, J, Mols, NP & Villadsen, AR 2011, 'Internal or external production and satisfaction with the chosen sourcing in Danish municipalities: Different theoretical explanations', *Local Government Studies*, vol. 37, no. 6, p. 621.

Ruzzier, J, Sohal, AS, Katna, P & Zyngier, S 2008, 'Success and failure in IT outsourcing by government agencies: Two Australian case studies', *International Journal of Business Information Systems*, vol. 3, no. 2, pp. 107-119.

Ryan, C, Stanley, T & Nelson, M 2002, 'Accountability disclosures by Queensland local government councils: 1997-1999', *Financial Accountability & Management*, vol. 18, no. 3, pp. 261-289.

Sager, T 1999, 'Manipulation in planning: The social choice perspective', *Journal of Planning Education and Research*, vol. 19, no. 2, pp. 123-134.

Salhofer, S, Obersteiner, G, Schneider, F & Lebersorger, S 2008, 'Potentials for the prevention of municipal solid waste', *Waste Management*, vol. 28, no. 2, pp. 245-259.

Saliterer, I & Korac, S 2013, 'Performance information use by politicians and public managers for internal control and external accountability purposes', *Critical Perspectives on Accounting*, vol. 24, pp. 502-517.

Sanger, MB 2008, 'From measurement to management: Breaking through the barriers to state and local performance', *Public Administration Review*, vol. 68, no. s1, pp. S70-S85.

Savas, ES & Schubert, A 1987, *Privatization: The Key to Better Government*, vol. 35, Chatham House Publishers: Chatham, NJ.

SCEW 2012, *National Waste Policy: Less Waste, More Resources. Implementation Report 2011*, Standing Council on Environment and Water 2012, Australia, <<http://www.scew.gov.au/publications/nwp/pubs/national-waste-policy-implementation-report-2011.pdf>>.

Sciulli, N 2011, 'The views of managers from a local coastal council on sustainability reporting issues', *Qualitative Research in Accounting & Management*, vol. 8, no. 2, pp. 139-160.

Scott, J, Beydoun, D, Rose, A, Low, G & Cattle, J 2005, 'Landfill management, leachate generation, and leach testing of solid wastes in australia and overseas', *Critical Reviews in Environmental Science and Technology*, vol. 35, no. 3, pp. 239-332.

Scott, RW 1987, 'The adolescence of institutional theory', *Administrative Science Quarterly*, vol. 32, no. 4, pp. 493-511.

—— 2005, Institutional Theory: Contributing to a theoretical research program, in KG Smith & MA Hitt (eds), *Great minds in management: The process of theory development*, Sage Publications, Inc, Oxford UK, pp. 460-485.

—— 2010, 'Reflections: The past and future of research on institutions and institutional change', *Journal of Change Management*, vol. 10, no. 1, pp. 5-21.

Shaoul, J, Stafford, A & Stapleton, P 2012, 'Accountability and corporate governance of public private partnerships', *Critical Perspectives on Accounting*, vol. 23, pp. 213-229.

Sharma, B 2005, 'Local government organisation on its journey to becoming a learning organisation', *Business Process Management Journal*, vol. 11, no. 4, pp. 388-402.

Sharma, B & Gadenne, D 2011, 'Balanced scorecard implementation in a local government authority: Issues and challenges', *Australian Journal of Public Administration*, vol. 70, no. 2, pp. 167-184.

Shaw, PJ, Lyas, JK, Maynard, SJ & van Vugt, M 2007, 'On the relationship between set-out rates and participation ratios as a tool for enhancement of kerbside household waste recycling', *Journal of Environmental Management*, vol. 83, no. 1, pp. 34-43.

Simões, P, Da Cruz, NF & Marques, RC 2012, 'The performance of private partners in the waste sector', *Journal of Cleaner Production*, vol. 29-30, pp. 214-221.

Simões, P & Marques, RC 2012, 'On the economic performance of the waste sector: A literature review', *Journal of Environmental Management*, vol. 106, pp. 40-47.

Smiley, S 2014, *New International Shipping Partner Announced for Tasmania*, ABC News, viewed 15 April 2015, <<http://www.abc.net.au/news/2014-11-26/new-international-shipping-partner-announced-for-tasmania/5919000>>.

Smith, HW 1975, *Strategies of Social Research: The Methodological Imagination*, Prentice-Hall, Englewood Cliffs, N.J.

Smith, KA & Cheng, RH 2006, 'Assessing reforms of government accounting and budgeting', *Public Performance & Management Review*, vol. 30, no. 1, pp. 14-34.

Sorell Council 2008, *Community Strategic Plan 2008–2013*, Sorell, Tasmania, <<http://www.sorell.tas.gov.au/publications-forms/strategies-plans-achievements>>.

—— 2012a, *Community Engagement Strategy 2012*, Sorell, Tasmania, <<http://www.sorell.tas.gov.au/publications-forms/strategies-plans-achievements>>.

—— 2012b, *Strategic Risk Register 2012–2013*, Sorell, Tasmania, <<http://www.sorell.tas.gov.au/publications-forms/strategies-plans-achievements>>.

Southern Midlands Council 2012, *Strategic Plan 2012–2017*, Kempton, Tasmania, <http://www.southernmidlands.tas.gov.au/assets/Southern_Midlands_Strategic_Plan_2012_2017_120822.pdf>.

Southern Waste Solutions 1998, *Development Proposal & Environmental Management Plan*, Copping Refuse Disposal Site Joint Authority, Copping, Tasmania, <<http://swstas.com.au/about-sws/governance/>>.

—— 2012a, *Rules of the Copping Waste Disposal Site Joint Authority*, Copping Waste Disposal Site Joint Authority, Copping, Tasmania, <<http://swstas.com.au/about-sws/governance/>>.

—— 2012b, *Strategic Plan 2012/13 to 2016/2017*

Business Plan 2012/13 to 2014/15, Copping Refuse Disposal Site Joint Authority, Copping, Tasmania, <<http://swstas.com.au/site-media/swstas/media/sws-business-plan.pdf>>.

Spee, P & Jarzabkowski, P 2011, 'Strategic planning as communicative process', *Organization Studies*, vol. 32, no. 9, pp. 1217-1245.

Stanley, T, Jennings, N & Mack, J 2008, 'An Examination of the content of community financial reports in Queensland local government authorities', *Financial Accountability & Management*, vol. 24, no. 4, pp. 411-438.

Sundell, A & Lapuente, V 2012, 'Adam Smith or Machiavelli? Political incentives for contracting out local public services', *Public Choice*, vol. 153, no. 3, pp. 469-485.

Tarn, DDC & Chien-Chih, E 2012, 'Knowledge outsourcing: A proposed model', *International Journal of Management*, vol. 29, no. 1, p. 247.

Tasman Council 2011, *Strategic Plan 2011–2016*, Nubeena, Tasmania, <<http://www.tasman.tas.gov.au/index.php/your-council/public-documents/category/19-strategic-plans>>.

—— 2013, *Annual Plan 2013–2014*, Nubeena, Tasmania, <<http://www.tasman.tas.gov.au/index.php/your-council/public-documents/category/17-annual-plans>>.

Tavares, AF & Camões, PJ 2007, 'Local service delivery choices in Portugal: A political transaction costs framework', *Local Government Studies*, vol. 33, no. 4, p. 535.

—— 2010, 'New forms of local governance', *Public Management Review*, vol. 12, no. 5, p. 587.

Teicher, J, Van Gramberg, B & Holland, P 2006, 'Trade union responses to outsourcing in a neo-liberal environment: A case study analysis of the Australian public sector', *Asia Pacific Business Review*, vol. 12, no. 2, pp. 243-256.

Teng, J, Cheon, M & Grover, V 1995, 'Decisions to outsource information systems functions: Testing a strategy–theoretic discrepancy model', *Decision Sciences*, vol. 26, no. 1, pp. 75-103.

Tonjes, DJ & Greene, KL 2012, 'A review of national municipal solid waste generation assessments in the USA', *Waste Management & Research*, vol. 30, no. 8, pp. 758-771.

Umashev, C & Willett, R 2008, 'Challenges to implementing strategic performance measurement systems in multi-objective organizations: The case of a large local government authority', *Abacus*, vol. 44, no. 4, pp. 377-398.

Vaara, E 2010, 'Taking the linguistic turn seriously: Strategy as a multifaceted and interdiscursive phenomenon', *Advances in strategic management*, vol. 27, pp. 29-50.

Vagadia, B 2012, *Strategic Outsourcing: The Alchemy to Business Transformation in A Globally Converged World*, Springer, Berlin.

Varadarajan, R 2009, 'Outsourcing: Think more expansively', *Journal of Business Research*, vol. 62, no. 11, pp. 1165-1172.

Veolia Environmental Services 2014, *Tasmania Shipping and Freight Inquiry: Response to Productivity Commission Draft Recommendations*, Australia.

Verner, JM & Abdullah, LM 2012, 'Exploratory case study research: Outsourced project failure', *Information and Software Technology*, vol. 54, no. 8, pp. 866-886.

Wagner, J 2011, 'Incentivizing sustainable waste management', *Ecological Economics*, vol. 70, no. 4, pp. 585-594.

Walker, T 2008, 'The applicability of an operations management approach to councils' waste services', *International Journal of Productivity and Performance Management*, vol. 57, no. 2, pp. 177-181.

Warner, ME 2009, 'Civic government or market-based governance? The limits of privatization for rural local governments', *Agriculture and Human Values*, vol. 26, no. 1, pp. 133-143.

—— 2011, 'Competition or cooperation in urban service delivery?', *Annals of Public & Cooperative Economics*, vol. 82, no. 4, pp. 421-435.

Warner, ME & Hefetz, A 2012, 'Insourcing and outsourcing: The dynamics of privatization among U.S. municipalities 2002–2007', *American Planning Association. Journal of the American Planning Association*, vol. 78, no. 3, p. 313.

Wassenaar, MC, Groot, T & Gradus, RHJM 2013, 'Municipalities' contracting out decisions: An empirical study on motives', *Local Government Studies*, pp. 1-21.

Webb, EJ, Campbell, DT, Schwartz, RD & Sechrest, L 1966, 'Unobtrusive measures: Nonreactive research in the social sciences'.

Weber, RP 1985, *Basic Content Analysis*, Sage Publications, London.

Williams, B 2011, 'Are local government authorities in Australia reporting on sustainability?', PhD thesis, University of Tasmania.

Williams, B, Wilmshurst, T & Clift, R 2011, 'Sustainability reporting by local government in Australia: Current and future prospects', *Accounting Forum*, vol. 35, no. 3, pp. 176-186.

Williamson, OE 1976, 'The economics of internal organization: Exit and voice in relation to markets and hierarchies', *American Economic Review*, vol. 66, no. 2, p. 369.

——— 1979, 'Transaction-Cost Economics: The governance of contractual relations', *Journal of Law & Economics*, vol. 22, no. 2, pp. 233-261.

——— 1981, 'The economics of organization: The transaction cost approach', *American Journal of Sociology*, vol. 87, no. 3, pp. 548-577.

——— 1987, 'Transaction cost economics: The comparative contracting perspective', *Journal of Economic Behavior and Organization*, vol. 8, no. 4, pp. 617-625.

——— 1993, 'Transaction cost economics and organization theory', *Industrial & Corporate Change*, vol. 2, no. 2, pp. 107-156.

——— 1999, 'Public and private bureaucracies: A transaction cost economics perspectives', *Journal of Law, Economics & Organization*, vol. 15, no. 1.

Wilson, DC 1996, 'Stick or carrot? The use of policy measures to move waste management up the hierarchy', *Waste Management & Research*, vol. 14, no. 4, pp. 385-398.

Woodbury, K, Dollery, BE & Rao, P 2003, 'Is local government efficiency measurement in Australia adequate? An analysis of the evidence', *Public Performance & Management Review*, vol. 27, no. 2, pp. 77-91.

Worthington, AC & Dollery, BE 2001, 'Measuring efficiency in local government: An analysis of New South Wales municipalities' domestic waste management function', *Policy Studies Journal*, vol. 29, no. 2, pp. 232-249.

Wüllenweber, K, Beimborn, D, Weitzel, T & König, W 2008, 'The impact of process standardization on business process outsourcing success', *Information Systems Frontiers*, vol. 10, no. 2, p. 211.

Yang, K, Hsieh, JY & Li, T-S 2010, 'Evaluating contracting-out performance in Taiwan: Comparing perceptions of public managers and private contractors', *Public Administration Quarterly*, vol. 34, no. 1, pp. 76-108.

Yang, K & Kathe, C 2005, 'Assessing citizen involvement efforts by local governments', *Public Performance & Management Review*, vol. 29, no. 2, pp. 191-216.

Yin, RK 2014, *Case Study Research: Design and Methods*, 5th edn, Sage Publications, Los Angeles.

Young, C, Ni, S & Fan, K 2010, 'Working towards a zero waste environment in Taiwan', *Waste Management & Research*, vol. 28, no. 3, pp. 236-244.

Zafra-Gómez, JL, Prior, D, Díaz, AMP & López-Hernández, AM 2013, 'Reducing costs in times of crises: Delivery forms in small and medium-sized local governments' waste management services', *Public Administration*, vol. 91, no. 1, pp. 51-68.

Zaman, AU 2012, 'Developing a social business model for zero waste management systems: A case study analysis', *Journal of Environmental Protection*, vol. 3, no. Report, p. 1458.

Zeemering, ES 2012a, 'The problem of democratic anchorage for interlocal agreements', *American Review of Public Administration*, vol. 42, no. 1, pp. 87-103.

—— 2012b, 'Recognising interdependence and defining multi-level governance in city sustainability plans', *Local Environment*, vol. 17, no. 4, pp. 409-424.

Zeemering, ES & Delabbio, DJ 2013, *A County Manager's Guide to Shared Services in Local Government*, IBM Center for The Business of Government, <<http://www.businessofgovernment.org/sites/default/files/A%20County%20Managers%20Guide%20to%20Shared%20Services.pdf>>.

Zhu, Z, Hsu, K & Lillie, J 2001, 'Outsourcing—a strategic move: The process and the ingredients for success', *Management Decision*, vol. 39, no. 5, pp. 373-378.

Zutshi, A, Sohal, A & Adams, C 2008, 'Environmental management system adoption by government departments/agencies', *International Journal of Public Sector Management*, vol. 21, no. 5, pp. 525-539.

ANNEXURES

Annexure I: E-mail to potential participants requesting an interview

From: Heinrich Oosthuizen

Sent: Wednesday, 24 June 2015 10:07 AM

To:

Subject: Request for an Interview - UTAS PhD Research project Heinrich Oosthuizen - 185066

PRIVATE AND CONFIDENTIAL

Dear Sir

My name is Heinrich Oosthuizen. I am currently conducting a PhD research project through a scholarship awarded by the University of Tasmania (Tasmanian School of Business and Economics) under the supervision of Professor Roger Willett. The topic of my research project is

Accounting for national waste data by Local Government Authorities and their service providers in the Southern Waste Strategy Authority jurisdiction

I have received approval from the UTAS ethics committee to conduct 12 selected, confidential 1 hour interviews with managers of government, LGAs' and their waste service providers as well as Councillors and representatives of community interest groups.

I would appreciate the opportunity to post 12 semi-structured interview questions to you specifically relating to the above topic that was approved by the UTAS ethics committee.

Your assistance will be of great benefit to this project. Please respond in confidence by return e-mail if you are willing to assist me in this PhD research project. I can also be reached on my mobile phone.

Attached please find a comprehensive information sheet for your perusal.

Should you require any additional information or would like to post some questions please do not hesitate to contact me.

Yours faithfully

Annexure II: Number of narrative references coded against NVivo interview question case nodes for each category of interviewee	LGA managers	Councillor	Environmental interest group representatives	Waste service provider managers	Tasmanian government manager
IQ1 - Organisation's role in the collection of waste data	28	1	4	14 (2)	1
IQ2 - Organisation's role in improvement of the regional waste data collection system	16	1	4	11	3
IQ3 - Tasmanian government's guidance of waste data collection	34 (2)	2	17 (1)	12	3
IQ4 - Adequate enforcement of waste regulations	29	3	8	8	6 (3)
IQ5 - Improvement required of organisation's waste data collection systems	32 (3)	7 (2)	12 (2)	7	9 (2)
IQ6 - Collection of waste data and improvement of collections systems as KPA's	27	6 (3)	2	4	3
IQ7 - The waste disposal levy's role in improving waste data collection systems	24	4	7	11	3
IQ8 - The role of the Partnership agreement between state and local government in improving waste data collection and reporting thereon	6	1	1	3	0
IQ9 - The role of the Partnership agreement between state and local government in improving regional waste data collection systems	6	1	0	1	0
IQ10 - Constraints in contractually managing and monitoring waste data collection	53 (1)*	15 (1)	10	20 (1)	4
IQ11 - Have regional networks improved waste data collection systems	34 (2)	1	8	13 (3)	5
IQ12 - Monitoring and managing of regional relationships for the supply of waste data for national reporting purposes	34 (2)	3	11 (3)	9	10 (1)

** Ranking top three most coded narrative references per category in brackets*